576/2825 FIGURE 517

577/2825 FIGURE 518

MTLFHFGNCFALAYFPYFITYKCTDLSEYNAFWKCVQAGVTYLFVQLCKMLFLATFFPTWEGGIYDFIGEFMKAS VDVADLIGLNLVMSRNAGKGEYKIMVAALGWATAELIMSRCIPLWVGARGIEFDWKYIQMSIDSNISLGPYIVAS AQVWMITRYDLYHTFRPAVLLLMFLRVYKAFVMETFVHLCSLGSWAVLMAGVVVKGLLVIRNLAMYVAVVNVHS

578/2825 FIGURE **519**

GCGCTGGTGATGTTCCCTCTACAGATGATCTATCTGGTGGTGAAAGCAGCCGTCGGACTGGTGCTGCCCGCCAAG CTGCGGGACCTGTCGCGGGAGAACGTCCTCATCACCGGCGGGGGAGAGGCATCGGGCGTCAGCTCGCCCGCGAG TTCGCGGAGCGCCGCCAGAAAGATTGTTCTCTGGGGCCGGACTGAGAAATGCCTGAAGGAGACGACGAGGAG ATCCGGCAGATGGGCACTGAGTGCCATTACTTCATCTGTGATGTGGGCAACCGGGAGGAGGTGTACCAGACGGCC AAGGCCGTCCGGGAGAAGGTGGGTGACATCACCATCCTGGTGAACAATGCCGCCGTGGTCCATGGGAAGAGCCTA ATGGACAGTGATGATGCCCTCCTCAAGTCCCAACACATCAACACCCTGGGCCAGTTCTGGACCACCAAGGCC TTCCTGCCGCGTATGCTGGAGCTGCAGAATGGCCACATCGTGTGCCTCAACTCCGTGCTGGCACTGTCTGCCATC CCCGGTGCCATCGACTACTGCACATCCAAAGCGTCAGCCTTCGCCTTCATGGAGAGCCTGACCCTGGGGCTGCTG GACTGTCCGGGAGTCAGCGCCACCACAGTGCTGCCCTTCCACACCAGCACCGAGATGTTCCAGGGCATGAGAGTC AGGTTTCCCAACCTCTTTCCCCCACTGAAGCCGGAGACGGTGGCCCGGAGGACAGTGGAAGCTGTGCAGCTCAAC CAGGCCCTCCTCCTCCCATGGACAATGCATGCCCTCGTTATCTTGAAAAGCATACTTCCACAGGCTGCACTC GAGGAGATCCACAAATTCTCAGGAACCTACACCTGCATGAACACTTTCAAAGGGCCGGACA**TAG**AGACAGGATGAA GACATGCTTGAGGAGCCACGGAGTTTGGGGGCCCACAGCACCTGGGCACACCCGAGCACCTGTCCATTGGCATG CTTCTGCTGGGTGAGCAGGACAGCTCCTGTCCCCAGCGAAGAATCCGGCTGCCCCTGGGCCAGTCCCAGGACCTT TGCACAGGACTGATGGGTGTAACTGACCCCCACAGGGAGGCAGGAAAACAGCCAGAAGCCACCTTGACACTTTTG AACATTTCCAGTTCTGTAGAGTTTATTGTCAATTGCTTCTCAAGTCTAACCAGCCTCAGCAGTGTGCATAGACCA TTTCCAGGAGGGTCTGTCCCCAGATGCTCTGCCTCCCGTTCCAAAACCCACTCATCCTCAGCTTGCACAAACTGG

579/2825 FIGURE 520

 $\label{thm:construction} MAWKRLGALVMFPLQMIYLVVKAAVGLVLPAKLRDLSRENVLITGGGRGIGRQLAREFAERGARKIVLWGRTEKC LKETTEEIRQMGTECHYFICDVGNREEVYQTAKAVREKVGDITILVNNAAVVHGKSLMDSDDDALLKSQHINTLG QFWTTKAFLPRMLELQNGHIVCLNSVLALSAIPGAIDYCTSKASAFAFMESLTLGLLDCPGVSATTVLPFHTSTE MFQGMRVRFPNLFPPLKPETVARRTVEAVQLNQALLLLPWTMHALVILKSILPQAALEEIHKFSGTYTCMNTFKG RT$

580/2825 FIGURE **521A**

GTGGGGTGGGGTGGGGGCTTGTCGCCCTTTCAGGCTCCACCCTTTGCGGAGATTATAAATAGTCATGAT TGAATTAGATTACAGCG**ATG**GGGACACAGAAGGTCACCCCAGCTCTGATATTTGCCATCACAGTTGCTACAATCG GCTCTTTCCAATTTGGCTACAACACTGGGGTCATCAATGCTCCTGAGAAGATCATAAAGGAATTTATCAATAAAA CTTTGACGGACAAGGGAAATGCCCCACCTCTGAGGTGCTCCTCACGTCTCTCTGGTCCTTGTCTGTGGCCATAT TTTCCGTCGGGGGTATGATCGGCTCCTTTTCCGTCGGACTCTTCGTCAACCGCTTTGGCAGGCGCAATTCAATGC TGATTGTCAACCTGTTGGCTGTCACTGGTGGCTGCTTTATGGGACTGTGTAAAGTAGCTAAGTCGGTTGAAATGC TGATCCTGGGTCGCTTGTTATTGGCCTCTTCTGCGGACTCTGCACAGGTTTTGTGCCCATGTACATTGGAGAGA TCTCGCCTACTGCCCTGCGGGGTGCCTTTGGCACTCTCAACCAGCTGGGCATCGTTGTTGGAATTCTGGTGGCCC CTATCCTACAAAGTGCAGCCCTTCCATTTTGCCCTGAAAGTCCCAGATTTTTGCTCATTAACAGAAAAGAAGAGG AGAATGCTAAGCAGATCCTCCAGCGGTTGTGGGGCACCCAGGATGTATCCCAAGACATCCAGGAGATGAAAGATG AGAGTGCAAGGATGTCACAAGAAAAGCAAGTCACCGTGCTAGAGCTCTTTAGAGTGTCCAGCTACCGACAGCCCA TCATCATTTCCATTGTGCTCCAGCTCTCTCAGCAGCTCTCTGGGATCAATGCTGTGTTCTATTACTCAACAGGAA TCTTCAAGGATGCAGGTGTTCAAGAGCCCATCTATGCCACCATCGGCGCGGGTGTGGTTAATACTATCTTCACTG TAGTTTCTCTATTTCTGGTGGAAAGGGCAGGAAGAAGGACTCTGCATATGATAGGCCTTGGAGGGATGGCTTTTT GTTCCACGCTCATGACTGTTTCTTTGTTATTAAAGGATAACTATAATGGGATGAGCTTTGTCTGTATTGGGGCTA TCTTGGTCTTTGTAGCCTTCTTTGAAATTGGACCAGGCCCCATTCCCTGGTTTATTGTGGCCGAACTCTTCAGCC AGGGCCCCGCCCAGCTGCGATGGCAGTGGCCGGCTGCTCCAACTGGACCTCCAACTTCCTAGTCGGATTGCTCT TCCCCTCCGCTGCTCACTATTTAGGAGCCTACGTTTTTATTATCTTCACCGGCTTCCTCATTACCTTCTTGGCTT ACGGTGCAGATAGATCTGGAAAGGACGGCGTCATGGAGATGAACAGCATCGAGCCTGCTAAGGAGACCACCACCA ATGTC<u>TAA</u>GTCGTGCCTCCTTCCACCTCCCCGGCATGGGAAAGCCACCTCTCCCTCAACAAGGGAGACCT CATCAGGATGAACCCAGGACGCTTCTGAATGCTGCTACTTAATTCCTTTCTCATCCCACGCACTCCATGAGCACC CCAAGGCTGCGGTTTGTTGGATCTTCAATGGCTTTTTAAATTTTATTTCCTGGACATCCTCTTCTGCTTAGGAGA GACCGAGTGAACCTACCTTCATTTCAGGAGGGATTGGCCGCTTGGCACATGACAACTTTGCCAGCTTTTCCTCCC TTGGGTTCTGATATTGCCGCACTAGGGGATATAGGAGGAGAAAAGTAAGGTGCAGTTCCCCCAACCTCAGACTTA CCAGGAAGCAGATACATATGAGTGTGGAAGCCGGAGGGTGTTTATGTAAGAGCACCTTCCTCACTTCCATACAGC TTTTTTAAGCGTAATTTTGCCAAATAATAAAAACAGAAGGAAATTGAGATTAGAGGGGAGGTGTTTAAAGAGAGGT TATAGAGTAGAAGATTTGATGCTGGAGAGGTTAAGGTGCAATAAGAATTTTAGGGAGAAATGTTGTTCATTATTGG AGGGTAAATGATGTGGTGCCTGAGGTCTGTACGTTACCTCTTAACAATTTCTGTCCTTCAGATGGAAACTCTTTA ACTTCTCGTAAAAGTCATATACCTATATAATAAAGCTACTGATTTCCTTGGAGCTTTTTTCTTTAAGATAATAGT TTACATGTAGTAGTACTTGAAATCTAGGATTATTAACTAATATGGGCATTGTAGTTAATGATGGTTGATGGGTTC TAATTTTGGATGGAGTCCAGGGAAGAGAAAGTGATTTCTAGAAAGCCTGTTCCCCTCACTGGATGAAATAACTCC TTCTTGTAGTAGTCTCATTACTTTTGAAGTAATCCCGCCACCTATCTCGTGGGAGAGCCATCCAAATAAGAAACC TAAAATAATTGGTTCTTGGTAGAGATTCATTATTTTTCCACTTTGTTCTTTAGGAGATTTTAGGTGTTGATTTTC TGTTGTATTTTAACTCATACCTTTAAAGGAATTCCCCAAAGAATGTTTATAGCAAACTTGGAATTTGTAACCTCA GCTCTGGGAGAGGATTTTTTTCTGAGCGATTATTATCTAAAGTGTGTTGTTGCTTTAGGCTCACGGCACGCTTGC GTATGTCTGTTACCATGTCACTGTGGTCCTATGCCGAATGCCCTCAGGGGACTTGAATCTTTCCAATAAACCAGG TCTCCCTTTCCCTTCTTGGTGCTTACACATCTCAGACCCTTTAGCCAAACCCTTGTCAGTGACAGTATTTTGGTT CTTAGTTCTCACTGTTCCCTCTGCTCCTGGAGCCTTTGAATAAAAATGCACGTAGCTGAGGCCGGATGCGGTGGC

581/2825 FIGURE **521B**

582/2825 FIGURE **522**

MGTQKVTPALIFAITVATIGSFQFGYNTGVINAPEKIIKEFINKTLTDKGNAPPSEVLLTSLWSLSVAIFSVGGM
IGSFSVGLFVNRFGRRNSMLIVNLLAVTGGCFMGLCKVAKSVEMLILGRLVIGLFCGLCTGFVPMYIGEISPTAL
RGAFGTLNQLGIVVGILVAQIFGLEFILGSEELWPLLLGFTILPAILQSAALPFCPESPRFLLINRKEEENAKQI
LQRLWGTQDVSQDIQEMKDESARMSQEKQVTVLELFRVSSYRQPIIISIVLQLSQQLSGINAVFYYSTGIFKDAG
VQEPIYATIGAGVVNTIFTVVSLFLVERAGRRTLHMIGLGGMAFCSTLMTVSLLLKDNYNGMSFVCIGAILVFVA
FFEIGPGPIPWFIVAELFSQGPRPAAMAVAGCSNWTSNFLVGLLFPSAAHYLGAYVFIIFTGFLITFLAFTFFKV
PETRGRTFEDITRAFEGQAHGADRSGKDGVMEMNSIEPAKETTTNV

583/2825 FIGURE **523**

CGGCGCCGGGGACCGCTGCCACCCCGCCTAGCGCAGCCCCGTCCTTCCGCAGCCCAACCGCCTCTTCCCGCCC CGCCCCATCCCGCCCACGGGCTCCAGTGGGCGGGACCAGAGGAGTCCCGCGTTCGGGGGAGTATGTCAAGGCCGTG ACCCGTGTATTATTGTCCGAGTGGCCGGAACGGGAGCCAACATGGCAGCGGTTCCGGGCGATGCTGCAGGGTCC TGAGAAGTATTTCTCGTTTTCATTGGAGATCACAGCATACAAAAGCCAATCGACAACGTGAACCAGGATTAGGAT TTAGTTTTGAGTTCACCGAACAGCAGAAAGAATTTCAAGCTACTGCTCGTAAATTTGCCAGAGAGGAAATCATCC CAGTGGCTGCAGAATATGATAAAACTGGTGAATATCCAGTCCCCCTAATTAGAAGAGCCTGGGAACTTGGTTTAA TGAACACACACTTCCAGAGAACTGTGGAGGTCTTGGACTTGGAACTTTTGATGCTTGTTTAATTAGTGAAGAAT TGGCTTATGGATGTACAGGGGTTCAGACTGCTATTGAAGGAAATTCTTTGGGGCAAATGCCTATTATTATTGCTG GAAATGATCAACAAAAGAAGAAGTATTTGGGGAGAATGACTGAGGAGCCATTGATGTGTGCTTATTGTGTAACAG GTCAGAAGATGTGGATAACCAACGGAGGAAAAGCTAATTGGTATTTTTTATTGGCACGTTCTGATCCAGATCCTA AAGCTCCTGCTAATAAAGCCTTTACTGGATTCATTGTGGAAGCAGATACCCCAGGAATTCAGATTGGGAGAAAGG AATTAAACATGGGCCAGCGATGTTCAGATACTAGAGGAATTGTCTTCGAAGATGTGAAAGTGCCTAAAGAAAATG TTTTAATTGGTGACGGAGCTGGTTTCAAAGTTGCAATGGGAGCTTTTGATAAAACCAGACCTGTAGTAGCTGCTG GTGCTGTTGGATTAGCACAAAGAGCTTTGGATGAAGCTACCAAGTATGCCCTGGAAAGGAAAACTTTCGGAAAGC ACCAGAGAGCAGCTTGGGAGGTTGATTCTGGTCGTCGAAATACCTATTATGCTTCTATTGCAAAGGCATTTGCTG GAGATATTGCAAATCAGTTAGCTACTGATGCTGTGCAGATACTTGGAGGCAATGGATTTAATACAGAATATCCTG TAGAAAAACTAATGAGGGATGCCAAAATCTATCAGATTTATGAAGGTACTTCACAAATTCAAAGACTTATTGTAG CCCGTGAACACATTGACAAGTACAAAAAT**TAA**AAAAATTACTGTAGAAATATTGAATAACTAGAACACAAGCCAC TGTTTCAGCTCCAGAAAAAAGAAAGGGCTTTAACGTTTTTTCCAGTGAAAACAAATCCTCTTATATTAAATCTAA GCAACTGCTTATTATAGTAGTTTATACTTTTGCTTAACTCTGTTATGTCTCTTAAGCAGGTTTGGTTTTTATTAA AATGATGTGTTTTCTTTAGTACCACTTTACTTGAATTACATTAACCTAGAAAACTACATAGGTTATTTTGATCTC AGATGTTACAAAATTTACATTTAGAAAATATTGTAGTATTTGAATACTGTCAACTTGACAGTAACTTTGTAGACT TAATGGTATTATAAAGTTCTTTTTATTGCAGTTTGGAAAGCATTTGTGAAACTTTCTGTTTGGCACAGAAACAG TCAAAATTTTGACATTCATATTCTCCTATTTTACAGCTACAAGAACTTTCTTGAAAATCTTATTTAATTCTGAGC CCATATTTCACTTACCTTATTTAAAATAAATCAATAAAGCTTGCCTTAAATTATTTTTATATGACTGTTGGTCTC TAGGTAGCCTTTGGTCTATTGTACACAATCTCATTTCATATGTTTGCATTTTTGGCAAAGAACTTAATAAAATTGT TCAGTGCTTATTATCAT

584/2825 FIGURE **524**

MAAGFGRCCRVLRSISRFHWRSQHTKANRQREPGLGFSFEFTEQQKEFQATARKFAREEIIPVAAEYDKTGEYPV PLIRRAWELGLMNTHIPENCGGLGLGTFDACLISEELAYGCTGVQTAIEGNSLGQMPIIIAGNDQQKKKYLGRMT EEPLMCAYCVTEPGAGSDVAGIKTKAEKKGDEYIINGQKMWITNGGKANWYFLLARSDPDPKAPANKAFTGFIVE ADTPGIQIGRKELNMGQRCSDTRGIVFEDVKVPKENVLIGDGAGFKVAMGAFDKTRPVVAAGAVGLAQRALDEAT KYALERKTFGKLLVEHQAISFMLAEMAMKVELARMSYQRAAWEVDSGRRNTYYASIAKAFAGDIANQLATDAVQI LGGNGFNTEYPVEKLMRDAKIYQIYEGTSQIQRLIVAREHIDKYKN

585/2825 FIGURE **525A**

CCAGGGTGATGCTGAAGATGACCTTCTTCCAAGGCCTCTAGAGCCATCAGCCTGTGCCAGGCACCCTCGACT AGAAGAAGAAGAAGTCCAAAGGCCTGGCCAATGTGTTCTGCGTCTTCACCAAAGGGAAGAAGAAGAAGAAGGCGTCAGC CGGCGGCGGCGGCGTGTGAGCGAGGAGGAGCTGGTGCGGCGCCAGAGCAAGGTGGAGGCGCTGTACGAGCTGC TGCGCGACCAGGTGCTGGGCGTGCTGCGGCGGCCGCTGGAGGCGCCCGAGCGGCTGCCCAGGCGCTGGCCG TGGTGGCGGAGCAGGACCGCCAGGCGGCGGCGGGGGCCGGGGACCTCGGGGCTGGCGCCACGC GCCCGCGGCGCTGCCAGCTGTGGCGGCGCGCGCGGGGGGGCGCCGAGGAGCGCATGGGCCAGCGCCGG CCGCGGGCCCGAGGTCCCCGAGAGCGTCTTTCTGCACTTGGGCCGCACCATGAAGGAGGACCTGGAGGCCGTGG ${\tt TGGAGCGGCTGAAGCCGCTGTTCCCCGCCGAGTTCGGCGTCGTGGCGGCCTACGCCGAGAGCTACCACCAGCACT}$ TCGCGGCCCACCTGGCCGCGTGGCGCAGTTCGAGCTGTGCGAGCGCGACACCTACATGCTGCTGCTGGGTGG TCCTGCCCCCAGGCAGATCCGACTGCTGGAGGCCACATTCCTGTCCAGTGAGGCGGCCAATGTGAGGGAGTTGA TGGACCGAGCTCTGGAGCTAGAGGCACGGCCCTGGGCTGAGGATGTGCCTCCCCAGAGGCTGGACGGCCACTGCC ACAGCGAGCTGGCCATCGACATCATCCAGATCACCTCCCAGGCCCAGGCCCAAGGCCGAGAGCATCACGCTGGACT AATTTCTGGAGAGAGCAAGCAGCTGACGAATTACAGGGCCAATGTTATTGCCAACATCAACAACTGCCTGTCCT TCCGGATGTCCATGGAGCAGAATTGGCAGGTACCCCAGGACACCCTGAGCCTCCTGCTGGGCCCCCTGGGTGAGC TCAAGAGCCACGGCTTTGACACCCTGCTCCAGAACCTGCATGAGGACCTGAAGCCACTGTTCAAGAGGTTCACGC ACACCCGCTGGGCCCCCTGTGGAGACCCTGGAAAACATCATCGCCACTGTAGACACGAGGCTGCCTGAGTTCT CAGAGCTGCAGGGCTGTTTCCGGGAGGAGCTCATGGAGGCCTTGCACCTGCACCTGGTGAAGGAGTACATCATCC CTGACACCATCCAGCACTTCTGCACCCAGCACGGCTCCCCGGCGACCTGGCTGCAGCCTGCTCTCCCTACGCTGG CCGAGATCATTCGCCTGCAGGACCCCAGTGCCATCAAGATTGAGGTGGCCACTTATGCCACCTGCTACCTGACT TCAGCAAAGGCCACCTGAGCGCTATCCTGGCCATCAAGGGGAACCTATCCAACAGTGAGGTCAAGCGCATCCGGA GCATCTTGGACGTCAGCATGGGGGCGCAGGAGCCCTCCCGGCCCCTATTTTCCCTTATAAAGGTTGGT**TAG**CTTT TCCTGTGGCCTGACCTGTGAGTGCCCAGCAAGCCTTGGGCACACCCCGCTGGGAGCTGTTAAGAGCAGCGC TGGTTCTCGGTTCCTCCGGGTCTCCTGTGCTCTGATGCTACTTCTGCCTAGCCCTGGCGGAGGTGCAGGCCCTG TCAGCTGGAACTGGACAGACCTTGGTTTGTTTACATGTCCGATGGGGGCAGCAGCTCCCATCCTGGGCAGCCAAC AGCCAGGCTCAGGGATCCCCGGACACCTCTGTCCAGAGCCCCTCCACAGTCGGCCTCATGACTGTCCTCCTCGTG GGTGGGGCCGAGGGCCCTCTTCAGCTCTCTGGAGACAGGGGCCGAGCCTCACCCATCTGCCCTCTGCAGCCCAGG CGTCTGGCAGGGGCTTTTAGGGTCCTGTGGCGAGCTGTGAGCACCGCCAGCGTTAGACGTCACATCCAGGTGGCC CCACGGCCCTACAGGCTGGCCCTGCAATGGGGCCCTGAGCCCTCTCTTCATCCCCCAAGGCCTCAACTAGAG GCAGGGCAAGCTTGACCTCTCACTGTTGACCCTTTGGCCTCTGTATTTGTTTCCTATTGCCGTGACAGGTTTCCA CGGCAGTCCTGCACTCCTTCTGGAGGCTCTAGGGGAGAATTCATTTCTGGCCTTTTCATTTTTAGAGGCTGACCG TAATTCTTGACTTCAGGCTCCTCCATCTTCAGAGCCAGCTGTGGGTAGTTGAATCTTTTTCCCGTCACCTCATTG ${\tt GGCTGGAGTGCAGTGGCCTGGTCATGGCATCAAGGCTCACTGCAGCCTGGACCTCCTGGTTCAAGTGATCCTCTT}$ GTCTCAGTCCCCTGAGACAATCCCCCACGCCCAGCTACATATTTTTGTGGATACAGGGTCTCATTCTGTTGCCTA GGCTTGTCTGGAACTCCTGGGCTCAAGGGATCTTGTAGCCTTAGCCTCCTAAAGTGCTGGGATTATAGGCATGAG TCACTCGTACCCGGCCTGCTCTACCGCTTTTAAGGACGCTTATGATCACATTGCGCCTACCCAGAGAACCCAGGT

586/2825 FIGURE **525B**

587/2825 FIGURE **526**

MSEASSEDLVPPLEAGAAPYREEEEAAKKKKEKKKKSKGLANVFCVFTKGKKKKGQPSSAEPEDAAGSRQGLDGP
PPTVEELKAALERGQLEAARPLLALERELAAAAAAGGVSEEELVRRQSKVEALYELLRDQVLGVLRRPLEAPPER
LRQALAVVAEQEREDRQAAAAGPGTSGLAATRPRRWLQLWRRGVAEAAEERMGQRPAAGAEVPESVFLHLGRTMK
EDLEAVVERLKPLFPAEFGVVAAYAESYHQHFAAHLAAVAQFELCERDTYMLLLWVENLYPNDIINSPKLVGELQ
GMGLGSLLPPRQIRLLEATFLSSEAANVRELMDRALELEARRWAEDVPPQRLDGHCHSELAIDIIQITSQAQAKA
ESITLDLGSQIKRVLLVELPAFLRSYQRAFNEFLERGKQLTNYRANVIANINNCLSFRMSMEQNWQVPQDTLSLL
LGPLGELKSHGFDTLLQNLHEDLKPLFKRFTHTRWAAPVETLENIIATVDTRLPEFSELQGCFREELMEALHLHL
VKEYIIQLSKGRLVLKTAEQQQQLAGYILANADTIQHFCTQHGSPATWLQPALPTLAEIIRLQDPSAIKIEVATY
ATCYPDFSKGHLSAILAIKGNLSNSEVKRIRSILDVSMGAQEPSRPLFSLIKVG

588/2825 FIGURE **527**

GACTCTCCAGTCCTCAGTCACCTTGGACAAAGAAGTGTGGATCCTCAGATTCCATCTTTTCCAACTCCAAGGTGC $\mathtt{C}\overline{\mathbf{ATG}}$ GCAGAGAAGGTGCTGGTAACAGGTGGGGCTGCTACATTGGCAGCCACACGGTGCTGGAGCTGCTGGAGGC GCGGGTCCAGGAGCTGACAGGCCGCTCTGTGGAGTTTGAGGAGATGGACATTTTGGACCAGGGAGCCCTACAGCG TCTCTTCAAAAAGTACAGCTTTATGGCGGTCATCCACTTTGCGGGGGCTCAAGGCCGTGGGCGAGTCGGTGCAGAA GCCTCTGGATTATTACAGAGTTAACCTGACCGGGACCATCCAGCTTCTGGAGATCATGAAGGCCCACGGGGTGAA GAACCTGGTGTTCAGCAGCTCAGCCACTGTGTACGGGAACCCCCAGTACCTGCCCCTTGATGAGGCCCACCCCAC GGGTGGTTGTACCAACCCTTACGGCAAGTCCAAGTTCTTCATCGAGGAAATGATCCGGGACCTGTGCCAGGCAGA ${\tt CAAGACTTGGAACGTAGTGCTGCGCTATTTCAACCCCACAGGTGCCCATGCCTCTGGCTGCATTGGTGAGGA}$ TCCCCAGGGCATACCCAACAACCTCATGCCTTATGTCTCCCAGGTGGCGATCGGGCGACGGGAGGCCCTGAATGT CTTTGGCAATGACTATGACACAGAGGATGGCACAGGTGTCCGGGATTACATCCATGTCGTGGATCTGGCCAAGGG CCACATTGCAGCCTTAAGGAAGCTGAAAGAACAGTGTGGCTGCCGGATCTACAACCTGGGCACGGGCACAGGCTA TTCAGTGCTGCAGATGGTCCAGGCTATGGAGAAGGCCTCTGGGAAGAAGATCCCGTACAAGGTGGTGGCACGGCG GGAAGGTGATGTGGCAGCCTGTTACGCCAACCCCAGCCTGGCCCAAGAGGAGCTGGGGTGGACAGCAGCCTTAGG $\tt GCTGGACAGGATGTGAGGATCTCTGGCGCTGGCAGAAGCAGAATCCTTCAGGCTTTGGCACGCAAGCC{\color{red}{\textbf{TGA}}} GG$ GCTGCTGGGGCCAAGCCAAGGGCCTCCCCTACCTCAAACCCCAGCTGGGCCCGCTTAGCCCACCAGGCATGAGGC CAAGAGTGAGTGAGGGGCAAGGCTCTGGCACAAAACCTCCTCCCAGGCACTCATTTATATTGCTCTGAAAG AGCTTTCCAAAGTATTTAAAAATAAAAACAAGTTTTCTTACACTGG

589/2825 FIGURE **528**

MAEKVLVTGGAGYIGSHTVLELLEAGYLPVVIDNFHNAFRGGGSLPESLRRVQELTGRSVEFEEMDILDQGALQR LFKKYSFMAVIHFAGLKAVGESVQKPLDYYRVNLTGTIQLLEIMKAHGVKNLVFSSSATVYGNPQYLPLDEAHPT GGCTNPYGKSKFFIEEMIRDLCQADKTWNVVLLRYFNPTGAHASGCIGEDPQGIPNNLMPYVSQVAIGRREALNV FGNDYDTEDGTGVRDYIHVVDLAKGHIAALRKLKEQCGCRIYNLGTGTGYSVLQMVQAMEKASGKKIPYKVVARR EGDVAACYANPSLAQEELGWTAALGLDRMCEDLWRWQKQNPSGFGTQA

590/2825 FIGURE **529**

GGCAACCTCTGCCTTCTTCCACTCGGAGTCGCGCTCCGCGCGCCCTCACTGCAGCCCCTGCGTCGCCG GGACCCTCGCGCGCGACCAGCCGAATCGCTCCTGCAGCAGAGCCAACATCCCATCACTCGGATGCGCATGAGAC CCTGGCTAGAGATGCAGATTAATTCCAACCAAATCCCGGGGCTCATCTGGATTAATAAAGAGGAGATGATCTTCC TTCACACAGGCCGATACAAAGCAGGGGAAAAGGAGCCAGATCCCAAGACGTGGAAGGCCAACTTTCGCTGTGCCA TGAACTCCCTGCCAGATATCGAGGAGGTGAAAGACCAGAGCAGGAACAAGGGCAGCTCAGCTGTGCGAGTGTACC CCAAGAGGAAGTCATGTGGGGATTCCAGCCCTGATACCTTCTCTGATGGACTCAGCAGCTCCACTCTGCCTGATG ACCACAGCAGCTACACAGTTCCAGGCTACATGCAGGACTTGGAGGTGGAGCAGGCCCTGACTCCAGCACTGTCGC CATGTGCTGTCAGCAGCACTCTCCCCGACTGGCACATCCCAGTGGAAGTTGTGCCGGACAGCACCAGTGATCTGT ACAACTTCCAGGTGTCACCCATGCCCTCCACCTCTGAAGCTACAACAGATGAGGATGAGGAAGGGAAATTACCTG AGGACATCATGAAGCTCTTGGAGCAGTCGGAGTGGCAGCCAACAAACGTGGATGGGAAGGGGTACCTACTCAATG AACCTGGAGTCCAGCCCACCTCTGTCTATGGAGACTTTAGCTGTAAGGAGGAGCCAGAAATTGACAGCCCAGGGG TGACCCCAGTCCGGTTGCCCTCCATCCAGGCCATTCCCTGTGCACCGTAGCAGGGCCCCTGGGCCCCTCTTATTC CTCTAGGCAAGCAGGACCTGGCATCATGGTGGATATGGTGCAGAGAGCTGGACTTCTGTGGGCCCCTCAACAGC GTGTCTGGGTTTTTCTTGTGGTGTAAAGCTGGCCCTGCCTCCTGGGAAGATGAGGTTCTGAGACCAGTGTATCAG GTCAGGGACTTGGACAGGAGTCAGTGTCTGGCTTTTTCCTCTGAGCCCAGCTGCCTGGAGAGGGTCTCGCTGTCA AGCGAAAATTGCACTAAATGAATCTCGTTCCAAAGAACTACCCCTTTTCAGCTGAGCCCTGGGGGACTGTTCCAAA GCCAGTGAATGTGAAGGAAACTCCCCTCCTTCGGGGCAATGCTCCCTCAGCCTCAGAGGAGCTCTACCCTGCTCC CTGCTTTGGCTGAGGGGCTTGGGAAAAAAACTTGGCACTTTTTCGTGTGGATCTTGCCACATTTCTGATCAGAGG CCTCAAGCCCCAGCAGCCCTCAACAGGCCCAGGGAGGGAAGTGTGAGCGCCTTGGTATGACTTAAAATTGGAAAT GTCATCTAACCATTAAGTCATGTGTGAACACATAAGGACGTGTGTAAATATGTACATTTGTCTTTTTATAAAAAG TAAAATTGTT

591/2825 FIGURE 530

MPITRMRMRPWLEMQINSNQIPGLIWINKEEMIFQIPWKHAAKHGWDINKDACLFRSWAIHTGRYKAGEKEPDPK
TWKANFRCAMNSLPDIEEVKDQSRNKGSSAVRVYRMLPPLTKNQRKERKSKSSRDAKSKAKRKSCGDSSPDTFSD
GLSSSTLPDDHSSYTVPGYMQDLEVEQALTPALSPCAVSSTLPDWHIPVEVVPDSTSDLYNFQVSPMPSTSEATT
DEDEEGKLPEDIMKLLEQSEWQPTNVDGKGYLLNEPGVQPTSVYGDFSCKEEPEIDSPGGDIGLSLQRVFTDLKN
MDATWLDSLLTPVRLPSIQAIPCAP

592/2825 FIGURE **531A**

CTGGGCCAGGCGCCGGGCAGGAAGGGAGGCGCCGCCGTGGCCATTCTTAAAGGCGCCCCGAGTGTAGGCGACAG GCCGCTGACGCGGGAAGGAAA**ATG**AGTGAGTCTTTGGTTGTTTGTGATGTTGCCGAAGATTTAGTGGAAAAGCT GAGAAAGTTTCGTTTTCGCAAAGAAACGAACAACGCTGCTATTATAATGAAGATTGACAAGGATAAACGCCTGGT GGTACTGGATGAGGAGCTTGAGGGCATTTCACCAGATGAACTTAAAGATGAACTACCTGAACGACAACCTCGCTT CATTGTGTATAGTTATAAATATCAACATGATGGAAGAGTTTCATATCCTCTGTGCTTTATTTTCTCCAGTCC TGTTGGATGTAAGCCTGAACAACAGATGATGTATGCTGGAAGTAAGAATAAGCTAGTCCAGACAGCTGAACTAAC CAAGGTATTTGAAATAAGAAATACCGAAGACCTAACTGAAGAATGGTTACGTGAGAAACTTGGATTTTTTCAC**TA** ATGTGAACTTCTGTGTTTCTAAAGTATTTATGTATTAACCTGACCATACTGGAATCAGACATAAATACTTATTTA TGCCTAAAAATGCACTGTTACTTACAGTTTGTTTCCTGCAGTAAAGAAAATTCTTCATTTGTGCAAAATTTTGAA CAAAGAGGAAATCATCTTCATAGTAATGAAACTTTGTAAAGTGTTTCCTTATATTGGTAATTGTTAGGTGGACTA CTTTTCTCCAGGGACTTTTTGCACTCTTGTGACTAATTTCTATAACTTATGGTTCGGAATTTGTTACTATTTACA GACACCATTGGAAAGTGGATATATTAGATTGTGAGAGACAACAGTTGCCTCCTTTTGACAAATACTGGATATTAG CAGTTTATTTATGAAAATAGCGTATTATCACTTGTCAAATCATTGAAATTCATTTGGGGTCAAAGACTTGAGTGA CCCAGTATTGAGCCATGAATAATTTAGTGTAACCTGTATTACAAGTACATTGATGAATTCTGTATCTTCTTTGGT TTCCTGTATCTTTTAATCAAGTCTAGAAACTATGTTCATCAGTCACTCATTTTTAAGGTCGGGAGTTAGATTTT ATGATAGAATTATGACTGTTAGCTTTTCTCCTTATAGCATCTTAGTCTTAGAAATTGGTGGGTTGTAATAATCAA AGACTTTTACACTGCCAGTATTCCACATTTGGTGAAATTAATACTTTTTTAAAGGGTCCAAATAAAATAATTTTC TAATGTGTATATCTGAAATTTGTAATAAAATCAACTTCATATTTTAAAAATTCCAACTATCTGCTTGCATTGGTG TAATATATGGCAGTCGAGAGTTATAATTTTGGGTATACTTGTGGTTAGTTTTGTGCCATAGGAAAAAATTATCTT AAAACTTTGGCCATAGTTAATAACATTAACACTTCAATAGCAATCACATCTTATATCCTAAATGTCAGAAGATAT TCTGAACTGGATGCCTGAATAGTTAACTAAACCAGTCTTGGTTAGATGATGGTACTCTTGGCATAAAGCGTAGGA TTCTGATATTTGGCATACTTGTAAAAACAAATACATAAGTAACCATTGAACATTAATTTGATAATAGGTCTAGAG ACTCTAAAAACTAACCAAACTTGGTGAGTGTATTCTTATATTAAGAATATCTTAGTCATCTCAAAACTAGCAAAA TTTAAATTTTGGCATGTTTTCCATTCATATGTTCTTTGCATTTTATTTTTTGAGGTTTCTGTGAGAAGTAAAGATA GTTGGAATTTTTGCGATATTGAATAGAACATCTTCTGTTCCCAACACTGTTTGGCTTCACTAATTTAGAAGTCAG TATTCCAATTTCCAGAGAGAAGAAAACTCACCCAGGAAGTTTAAAAATTCTTTAAACAGGTATTTTGATATTG AATGAAGGAAATGAGGTTTTGTTTCACCTGTTTTGCAGCAGTAAGAGAAACTAGTGCTGCAAGAATGTATTTTTT AATGAAGTTCCTTATTTTGTCTTGCATGTTTTAGTTTTGCTTATTTTTAAATTTGGAGGTCCTCCATAATGTCAG ATAATATTGACCTGCCATACGTTAGCACTCTTAGTTCCGCTACTGTCTTTAACAGGAGCAAAGAGCTGTGATAAA CCATGCTTTTTTGAGCTTGTCTGACTCCTAATTAATAACATGTTTTTTGGCAAGACAACAGATTGAGGTTAGAGGA TCAGTAGGACATTTTTATTCCATCTGTCCTATGGGGAAATTTACAAATCCCGTGCTCTAAAATGTTCTCAAACAT TTATATAGATTTCCCTTTCATCTTACTAAATTTTGCATTGTTCTTTTCAAGTATGTTTCGTATTTACTGTCTTTT TTTCTGCCATTTCCCAAATAATAACTCCAGATTTCATAATTCCAGTTTTTACATTCCGTTATCTTTCTGGTACAA CCATTCCCATTCAGCCTTAAATCTGAGTCCTTTTTAGCAGCAACTTTTTTCCTGGGATCCTCCTTCGTGGTCTTC TAAGTCAGTGTTAGTTTTGAAATTTTTGGCCCTGCATAAGTTCTGCATAGCATCTAATGTCAAAATAGAACCAAC TGCTGAAATTCCAAAATGTCTGAGTTTTGAATAGTGATCACTTTGTTCTGGTATTGACGCAATTATATTAGGAAA AAAGTTGGTTGACTGTTTTGTTTAATTGACTTCTAAAATGTTCAAATTGTCTAGTTCTAAAAGTTTACTAAATG CCTAGTGCAGTTAAACATACTCTTGTTTAAGTGTGTGTTGCTAAATTTTTTTACTGTCATTACTAAATAATCTGTG TGGCAAAATGTGTGTCAGCACTTTTCCCTCCTTTTTTATCTCCTATTTTCAGGAGTCAAATGTAGCCATAAACTG TATCCTTGTCTGACACTTTAGCTAAAAATTTCCAGTTAGGGGAGTTTATTGCCAAATTAAATTTGGCTGTTCCCC CCAACCCATATAGATATTAAGGAAGGTGTACTTAAAAAATGTTTGGACTGCTTTTAAAACCTGAGCAATGTCATT AATCCATATGTGGACTAGTGATAATAGATATTTTCATAAGAGTTTAAATGACTGATATTTGGTGGAAGTAGAGA GTAACTCAATATCTATCAATTCAAGTATTCTTACTATGGTTGCCTTTCCCTATTTGTTCAATAGACTGATAATA

593/2825 FIGURE **531B**

CTGGTATTTATAGAGTTTGAGCCATTACAACTTTTGTGAGGATGTGTTTCAAACATTTCTGGACAAATCTTATTT
TGTATTTCTGGAAGAATGTAGTAATCTTCTAGACCGCTTAAAACCAATGCTCCCAAGCTGAATATTCTTGAGCAA
ATTTGTTTTTATTATTATGCCATTTGACATTTCAAATCAGTGCTCATATACAGTAAACTTGTGATAGAAATTGTATT
TTATTGCTTTTTGGATTATAATTCATATAAATATAATTACTTGAATATTGTTTGAGATCATTAACATGCCAGGGC
AGTTCCCACTGATTTAGATGGTCCAAGATAATCTCATTCAGGAGGCTTGAAACATTAATGGTTTAGTCTTGTGAA
TTTTAACAGTTCTCTGTCATCGTTTAACAAAACCAACAACTGACAACACCTCCTTAAGCTGTGGTTTCAGTCTCTG
CTAGTTCATATTGCATGTTTATTTTGGACAGTCTTTTGTTAAGCATGGTGCTTGTACTAATAAAATGTT
AACATT

594/2825 FIGURE 532

MSESLVVCDVAEDLVEKLRKFRFRKETNNAAIIMKIDKDKRLVVLDEELEGISPDELKDELPERQPRFIVYSYKY QHDDGRVSYPLCFIFSSPVGCKPEQQMMYAGSKNKLVQTAELTKVFEIRNTEDLTEEWLREKLGFFH

595/2825 FIGURE 533

596/2825 FIGURE 534

 ${\tt MEEASEGGGNDRVRNLQSEVEGVKNIMTQNVERILARGENLEHLRNKTEDLEATSEHFKTTSQKVARKFWWKNVKMIVLICVIVFIIILFIVLFATGAFS}$

597/2825 FIGURE 535A

GGCCCGGCTGCGAGGAGGAGGCGGCGCGCGCAGGAGGATGTACTTGGTGGCGGGGACAGGGGGTTGGCCGGC TGCGGGCACCTCCTGGTCTCGCTGGGGGCTGCTGCTGCTGCTGCGCGCGCCTCCGGCACCCGGGCGCTCTGC CTGCCCTGTGACGAGTCCAAGTGCGAGGAGCCCAGGAACTGCCCGGGGAGCATCGTGCAGGGCGTCTGCGGCTGC TGCTACACGTGCGCCAGCCAGAGGAACGAGAGCTGCGGCGCACCTTCGGGATTTACGGAACCTGCGACCGGGGG CTGCGTTGTGTCATCCGCCCCCGCTCAATGGCGACTCCCTCACCGAGTACGAAGCGGGCGTTTGCGAAGATGAG GGGAAATGTGAATGTAACACCATTCGAACCTGCAGCAATCCCTTTGAGTTTCCAAGTCAGGATATGTGCCTTTCA GCTTTAAAGAGAATTGAAGAAGAAGCCAGATTGCTCCAAGGCCCGCTGTGAAGTCCAGTTCTCCCACGTTGT CCTGAAGATTCTGTTCTGATCGAGGGTTATGCTCCTCCTGGGGAGTGCTGTCCCTTACCCAGCCGCTGCGTGTGC AACCCCGCAGGCTGTCTGCGCAAAGTCTGCCAGCCGGGAAACCTGAACATACTAGTGTCAAAAAGCCTCAGGGAAG CCGGGAGAGTGCTGTGACCTCTATGAGTGCAAACCAGTTTTCGGCGTGGACTGCAGGACTGTGGAATGCCCTCCT GTTCAGCAGACCGCGTGTCCCCCGGACAGCTATGAAACTCAAGTCAGACTAACTGCAGATGGTTGCTGTACTTTG CCAACAAGATGCGAGTGTCTCTCTGGCTTATGTGGTTTCCCCGTGTGTGAGGTGGGATCCACTCCCCGCATAGTC TTTAACAATGTGGAATATTATGATGGAGACATGTTTCGAATGGACAACTGTCGGTTCTGTCGATGCCAAGGGGGC GTTGCCATCTGCTTCACTGCCCAGTGTGGTGAGATAAACTGCGAGAGGTACTACGTGCCCGAAGGAGAGTGCTGC GGAGACCGGTGGCGGAAGACGACTGCACATTCTGCCAGTGCGTCAACGGTGAACGCCACTGCGTTGCGACCGTC ACAGTTGATCCACCTGCATGTGGGGAGTTATCAAACTGCACTCTGACAGGGAAGGACTGCATTAATGGTTTCAAA CGCGATCACAATGGTTGTCGGACCTGTCAGTGCATAAACACCGAGGAACTATGTTCAGAACGTAAACAAGGCTGC ACCTTGAACTGTCCCTTCGGTTTCCTTACTGATGCCCAAAACTGTGAGATCTGTGAGTGCCGCCCAAGGCCCAAG AAGTGCAGACCCATAATCTGTGACAAGTATTGTCCACTTGGATTGCTGAAGAATAAGCACGGCTGTGACATCTGT CGCTGTAAGAATGTCCAGAGCTCTCATGCAGTAAGATCTGCCCCTTGGGTTTCCAGCAGGACAGTCACGGCTGT CTTATCTGCAAGTGCAGAGGCCTCTGCTTCAGCTGGGCCACCCATCCTGTCGGGCACTTGTCTCACCGTGGAT GGTCATCATCATAAAAATGAGGAGAGCTGGCACGATGGGTGCCGGGAATGCTACTGTCTCAATGGACGGGAAATG TGTGCCCTGATCACCTGCCCGGTGCCTGCCTGTGGCAACCCCACCATTCACCCTGGACAGTGCTGCCCATCATGT GTGGAAGGAGAAACGTGGAACATTGACTCCTGTACTCAGTGCACCTGCCACAGCGGACGGGTGCTGTGAGACA GAGGTGTGCCCACCGCTGCTCTGCCAGAACCCCTCACGCACCCAGGATTCCTGCTGCCCACAGTGTACAGATCAA CCTTTTCGGCCTTCCTTGTCCCGCAATAACAGCGTACCTAATTACTGCAAAAATGATGAAGGGGATATATTCCTG GCAGCTGAGTCCTGGAAGCCTGACGTTTGTACCAGCTGCATCTGCATTGATAGCGTAATTAGCTGTTTCTCTGAG TCCTGCCCTTCTGTATCCTGTGAAAGACCTGTCTTGAGAAAAGGCCAGTGTTGTCCCTACTGCATAGAAGACACA ATTCCAAAGAAGGTGGTGTGCCACTTCAGTGGGAAGGCCTATGCCGACGAGGAGCGGTGGGACCTTGACAGCTGC ACCCACTGCTACTGCCTGCAGGGCCAGACCCTCTGCTCGACCGTCAGCTGCCCCCTCTGCCCTGTGTTGAGCCC AAGACAAACCATCGAGGAGAGGTTGACCTGGAGGTTCCCCTGTGGCCCACGCCTAGTGAAAATGATATCGTCCAT $\verb|CTCCCTAGAGATATGGGTCACCTCCAGGTAGATTACAGAGATAACAGGCTGCACCCAAGTGAAGATTCTTCACTG|\\$ AAGAAACAGTGGATACCACTGCTTTGCTGGTATCGAACACCAACTAAGCCTTCTTCCTTAAATAATCAGCTAGTA TCTGTGGACTGCAAGAAAGGAACCAGAGTCCAGGTGGACAGTTCCCAGAGAATGCTAAGAATTGCAGAACCAGAT GCAAGATTCAGTGGCTTCTACAGCATGCAAAAACAGAACCATCTACAGGCAGACAATTTCTACCAAACAGTG**TGA**

AGAAAGGCAACTAGGATGAGGTTTCAAAAGACGGAAGACGACTAAATCTGCTCTAAAAAGTAAACTAGAATTTGT
GCACTTGCTTAGTGGATTGTATTGGATTGTGACTTGATGTACAGCGCTAAGACCTTACTGGGATGGGCTCTGTCT
ACAGCAATGTGCAGAACAAGCATTCCCACTTTTCCTCAAGATAACTGACCAAGTGTTTTCTTAGAACCAAAGTTT
TTAAAGTTGCTAAGATATATTTGCCTGTAAGATAGCTGTAGAGATATTTGGGGTGGGGACAGTGAGTTTGGATGG
GGAAATGGGTGGGAGGGTGTTTGGGAAGAAAAATTGGTCAGCTTGGCTCGGGGAGAAACCTGGTAACATAAAA
GCAGTTCAGTGGCCCAGAGGTTATTTTTTTCCTATTGCTCTGAAGACTGCACTGGTTGCTGCAAAGCTCAGGCCT

598/2825 FIGURE 535B

GAATGAGCAGGAAACAAAAAAGGCCTTGCGACCCAGCTGCCATAACCACCTTAGAACTACCAGACGAGCACATCA GAACCCTTTGACAGCCATCCCAGGTCTAAAGCCACAAGTTTCTTTTCTATACAGTCACAACTGCAGTAGGCAGTG AGGAAGCCAGAGAAATGCGATAGCGGCATTTCTCTAAAGCGGGTTATTAAGGATATATACAGTTACACTTTTTGC TGCTTTTATTTTCTTCCAAGCCAATCAATCAGCCAGTTCCTAGCAGAGTCAGCACATGAACAAGATCTAAGTCAT TTGAAGCTCTAGCTTAAGAAGAACTTTTTTTAAAAAGACTGTTTGGGGATTCTTTTTCCTTATTATATACTGAT TCTACAAAATAGAAACTACTTCATTTTAATTGTATATTATTCAAGCACCTTTGTTGAAGCTCAAAAAAATGATG CCTCTTTAAACTTTAGCAATTATAGGAGTATTTATGTAACTATCTTATGCTTCAAAAAACAAAAGTATTTGTGTG CATGTGTATATATATATATATATATATATATATTTTATACACATACAATTTATGTTTTCCTGTTGAATGTATTTT TATGAGATTTTAACCAGAACAAAGGCAGATAAACAGGCATTCCATAGCAGTGCTTTTGATCACTTACAAATTTTT TGTGTGTGTGTGTGCGCGCGCACGCACGCCTTGAGCAGTCAGCATTGCACCTGCTATGGAGAAGGGTATTCCT TTATTAAAATCTTCCTCATTTGGATTTGCTTTCAGTTGGTTTTCAATTTGCTCACTGGCCAGAGACATTGATGGC AACTTTTCAAACAGCCCTTAGCACTTTTATACTAATTAACCCATTTGTGCATTGAGTTTTCTTTTAAAAATGCTT GTTGTGAAAGACACAGATACCCAGTATGCTTAACGTGAAAAGAAAATGTGTTCTGTTTTGTAAAGGAACTTTCAA ATTAATCTGAAGATTAACCATTTTTTTGTCTTAGAATATCAAAAAGAAAAAGAAAAAGGTGTTCTAGCTGTTTGC TTTATCAAAAAAATTGTAGATGCTTGCTTTTTGTTTTTCAATCATGGCCATATTATGAAAATACTAACAGGAT ATAGGACAAGGTGTAAATTTTTTTATTATTATTATTTATAAAGATATGATTTATCCTGAGTGCTGTATCTATTACTCTT TTACTTTGGTTCCTGTTGTGCTCTTGTAAAAGAAAAATATAATTTCCTGAAGAATAAAATAGATATATGGCACTT GGAGTGCATCATAGTTCTACAGTTTGTTTTTGTTTTCTCAAAAAAGCTGTAAGAGAATTATCTGCAACTTGATT

599/2825 FIGURE **536**

MYLVAGDRGLAGCGHLLVSLLGLLLLLARSGTRALVCLPCDESKCEEPRNCPGSIVQGVCGCCYTCASQRNESCG
GTFGIYGTCDRGLRCVIRPPLNGDSLTEYEAGVCEDENWTDDQLLGFKPCNENLIAGCNIINGKCECNTIRTCSN
PFEFPSQDMCLSALKRIEEEKPDCSKARCEVQFSPRCPEDSVLIEGYAPPGECCPLPSRCVCNPAGCLRKVCQPG
NLNILVSKASGKPGECCDLYECKPVFGVDCRTVECPPVQQTACPPDSYETQVRLTADGCCTLPTRCECLSGLCGF
PVCEVGSTPRIVSRGDGTPGKCCDVFECVNDTKPACVFNNVEYYDGDMFRMDNCRFCRCQGGVAICFTAQCGEIN
CERYYVPEGECCPVCEDPVYPFNNPAGCYANGLILAHGDRWREDDCTFCQCVNGERHCVATVCGQTCTNPVKVPG
ECCPVCEEPTIITVDPPACGELSNCTLTGKDCINGFKRDHNGCRTCQCINTEELCSERKQGCTLNCPFGFLTDAQ
NCEICECRPRPKKCRPIICDKYCPLGLLKNKHGCDICRCKKCPELSCSKICPLGFQQDSHGCLICKCREASASAG
PPILSGTCLTVDGHHHKNEESWHDGCRECYCLNGREMCALITCPVPACGNPTIHPGQCCPSCADDFVVQKPELST
PSICHAPGGEYFVEGETWNIDSCTQCTCHSGRVLCETEVCPPLLCQNPSRTQDSCCPQCTDQPFRPSLSRNNSVP
NYCKNDEGDIFLAAESWKPDVCTSCICIDSVISCFSESCPSVSCERPVLRKGQCCPYCIEDTIPKKVVCHFSGKA
YADEERWDLDSCTHCYCLQGQTLCSTVSCPPLPCVEPINVEGSCCPMCPEMYVPEPTNIPIEKTNHRGEVDLEVP
LWPTPSENDIVHLPRDMGHLQVDYRDNRLHPSEDSSLDSIASVVVPIIICLSIIIAFLFINQKKQWIPLLCWYRT
PTKPSSLNNQLVSVDCKKGTRVQVDSSQRMLRIAEPDARFSGFYSMQKQNHLQADNFYQTV

600/2825 FIGURE 537

CCATCCGCCTGCTCCTGGAGTTCACGGATACCTCTTATGAGGAGAAACGGTACACGTGCGGGGAAGCTCCTGACT ATGATCGAAGCCAATGGCTGGATGTGAAATTCAAGCTAGACCTGGACTTTCCTAATCTGCCCTACCTCCTGGATG AAGAAGAAAAGATTCGAGTGGACATCATAGAGAACCAAGTAATGGATTTCCGCACACAACTGATAAGGCTCTGTT ACAGCTCTGACCACGAAAAACTGAAGCCTCAGTACTTGGAAGAGCTACCTGGACAACTGAAACAATTCTCCATGT TTCTGTGGAAATTCTCATGGTTTGCCGGGGAAAAGCTCACCTTTGTGGATTTTCTCACCTATGATATCTTGGATC ${\tt AGAACCGTATATTTGACCCCAAGTGCCTGGATGAGTTCCCAAACCTGAAGGCTTTCATGTGCCGTTTTGAGGCTT}$ TGGAGAAAATCGCTGCCTACTTACAGTCTGATCAGTTCTGCAAGATGCCCATCAACAACAAGATGGCCCAGTGGG $\texttt{GCAACAAGCCTGTATGC} \underline{\textbf{TGA}} \texttt{GCAGGAGGCAGACTTGCAGAGCTTGTTTTGTTTCATCCTGTCCGTAAGGGGTCAG}$ CGCTCTTGCTTTTCCATGAATAGCACTTATGTTACTGGTGTCCAGCTGAGTTTCTCTTGGGTATAAAG GCTAAAAGGGAAAAAGGATATGTGGAGAATCATCAAGATATGAATTGAATCGCTGCGATACTGTGGCATTTCCCT ACTCCCCAACTGAGTTCAAGGGCTGTAGGTTCATGCCCAAGCCCTGAGAGTGGGTACTAGAAAAAACGAGATTGC ACAGTTGGAGAGAGCAGGTGTTAAATGGACTGGAGTCCCTGTGAAGACTGGGTGAGGATAACACAAGTAAAAC TATTTCAGACTGGTGGGCTAGCCAATAGAGTTGGCAATTGCTTATTGAAACTCATTAAAAATAATAGAGCCCCAC $\verb|TTGACACTATTCACTAAAATTAATCTGGAATTTAAGGCCCAACATTAAACACAAAGCTGTATTGAT|$

601/2825 FIGURE 538

MSCESSMVLGYWDIRGLAHAIRLLLEFTDTSYEEKRYTCGEAPDYDRSQWLDVKFKLDLDFPNLPYLLDGKNKIT QSNAILRYIARKHNMCGETEEEKIRVDIIENQVMDFRTQLIRLCYSSDHEKLKPQYLEELPGQLKQFSMFLWKFS WFAGEKLTFVDFLTYDILDQNRIFDPKCLDEFPNLKAFMCRFEALEKIAAYLQSDQFCKMPINNKMAQWGNKPVC

602/2825 FIGURE 539

 $\tt CGGCTGCTGCCACTGCTGTGCTGGGGGGCCCGGTCGCCAGGCAAAAAGCCCTCCACGTTTGAGGGGAGTC \textbf{ATG}$

AGCCGTTTCCTGAATGTGTTAAGAAGTTGGCTGGTTATGGTGTCCATCATAGCCATGGGGAACACGCTGCAGAGC TTCCGAGACCACACTTTTCTCTATGAAAAGCTCTACACTGGCAAGCCAAACCTTGTGAATGGCCTCCAAGCTCGG ACCTTTGGGATCTGGACGCTGCTCTCATCAGTGATTCGCTGCCTCTGTGCCATTGACATTCACAACAAGACGCTC TATCACATCACACTCTGGACCTTCCTCCTTGCCCTGGGGCATTTCCTCTGTGTGTTTTGTCTATGGAACTGCA GCTCCCACGATTGGCGTCCTGGCACCCCTGATGGTGGCAAGTTTCTCCATCCTGGGTATGCTGGTCGGGCTCCGG TATCTAGAAGTAGAACCAGTATCCAGACAGAAGAAGAGAAAC**TGA**GGCCAGCATTATCACCTCCAGGACTTTCTC TTATTCACTTTTAGCCTCTTTTTTAAATTTTAAAATTTAAAGATATGCATACTGAAAAGTATATAACATGTACG GCCCACTGTGTCTCCCCTACCTGCAACCTCTTCCAGGCTCCCTTTTCCAGCCTTCCCCTTTTTCCCTTTTA AGCTGTGACCAAGGGCTGCCTCAAGGGGTTGTCCACGCAGGTTGGGCTCCTCTCTGCTGCTGCTGGACCCAAGACTCT TCTACAGATGCATGAGGGTTGGAAGAGTCTGGGCTGTTTTTTAGACCTTCTGGTCAGCTGTATTTGTGTAACAACT TTTGTAATAAATAGAAAAACCCTCTGCTCTGATCAGTTCTTGTACTTTGACCTCTGCTAAGACAAGAGCATGGCT GCCTCCTCTGAGCCCTAGGAGAATCACAGCTTTATGCCTGATTGAATACACCATAGTGAGTAGGACAGCTCATGA CACAGGTCAGCCTGGCTCCCTCCGGCTCCTTACTGTCATTTGCTCATTTCCTCTTGTATTCTTGAAGTCAAATCTT CTTTTTCTCACCTTCAAGAGTCTGCGTTCACAACTAAACACTAAGTGCCCTTTCTTATTTCCTCCTAAAGAAGA AACAGATTCTTGAGAGAGCAGAGACAAAAAAATAGAACTAGGCAGCATAGATGAAACAACTGCATGACATGGGAA GAAGACAACTAAACCCCGAGGAGAATGCACTGGAATGGACAGTTGCTCTTAAACCCTACCCAGAGGGCCTCCCCC AGCTGGACCCTCATACACAGTGTGTGTATCCAAAAGGCCATTGCTATTTCAGCAAATATTTGTTGAGTACTTCTC CATGCCGGACACTTGGGAAAGAGAAATGAACGACACAGGCAATGCCCCTGCCCTGTGGGCCTTATATTATAGTCA ATTTTGGTCAAGAAGGAATGTGGGGTGGGCAGTGGGGAACGTAACTTAAATTAGATCATCAGAAAGTCCTCCCTG AGGAGATGGATTTTTTTTTTTTTTAGAGACGGGGTTTCACTCTGTCACCCAGGCTGGGAATTGCAGTGGCAC AATCCTCACTGCTGCCTCAACTTCCTGGGCTCAAGTGACCCTCCTGCATCAGCTTCCCAAGTAGCTGGGACTGC AAGTGTGTACCACCACATCCAGCTAACATTTTTGGGGGTGGGAAGAGATGGGGTCTTACTATGTTGTCCAGGCTA AGAGGTGGGATTTGAGCTGAGACTTGAATGCCCAGGAGTTAAATGTCTTAAGATATGGAGCAGGCCGTTAGAAAG GAGGGAGCAGCAACTGGAAGGTAGAATAGTCTTATTCAAGGAATAAGAACTATGTAATCACAGCATGGTGAAGAG TTAGGAAGTGAAAAAAAAAAAAA

603/2825 FIGURE 540

 ${\tt MSRFLNVLRSWLVMVSIIAMGNTLQSFRDHTFLYEKLYTGKPNLVNGLQARTFGIWTLLSSVIRCLCAIDIHNKTLYHITLWTFLLALGHFLSELFVYGTAAPTIGVLAPLMVASFSILGMLVGLRYLEVEPVSRQKKRN$

604/2825 FIGURE **541**

 ${\tt AGTACATCGACCCCGAGACCAAGAAGCACATCCCGTACCGCGAGCACAAGAGCCTGACGGGCACGGCGCGCTAC} \textbf{A} \textbf{C} \textbf{A}$ TGAGCATCAACACGCACCTGGGCAAGGAGCAGAGCCGCCGCGACGACCTGGAGGCGCTGGGCCACATGTTCATGT ACTTCCTGCGCGGCAGCCTCCCCTGGCAGGGGCTCAAGGCCGACACGCTCAAGGAGCGGTACCAGAAGATCGGGG ACACCAAACGCGCCACGCCCATCGAGGTGCTCTGCGAGAACTTCCCAGAGGAGATGGCCACGTACCTGCGCTATG TGCGGCGCCTGGACTTCTTCGAGAAGCCCGACTATGACTACCTGCGGAAGCTCTTCACCGACCTCTTCGACCGCA GTGGCTTCGTGTTCGACTATGAGTACGACTGGGCCGGGAAGCCCCTGCCGACCCCCATCGGCACCGTCCACACCG ACCTGCCCTCCCAGCCTCAGCTCCGGGACAAAACCCAGCCCCTGAATCTTCTCCGTGCAGCCCCTTGGGGCCCC AAATTTCTACACCTGTGTCTAGTCCTCCCCTCCAAGAGCAT**TAA**CTATTTAAAACAAGGAAAAGAGGGAAAAAAAA AACAGAGGCCCGCCTACCCCACTCCTGCCCCTCCGTTTCTTTGCTGAAGTGAGTAGTGTGATCCTGGAGGCCCC CCGGCCTGGCCCCGCCAGCCGCCCCGTTAGCGTCATAAAGTCCAGCTTGTCTCCCTCGATCCAAAGGCC GTTTTCTCGAGGGGAGGCCGGCCTGGAGGGGTGCTGTGGAGCTGTCTTGCCCAGGCCCTCCTGGGAGGG GGACAGGCATTGTTGCCAGGGGTGAGGCCGTGCCCCAGGCCTCCCCGAAACCAAAGGGGAAGGCAGGGGTGGGGC CGTGGCTGAAGCCGGCTCCCCAACCAAAATGCTGCACCAAAGCTCGGGCGCGCGGGGCACGGCTGCTGCAGTCTC TTCCCAGCCTGGCCAAGGGGGGGGTGGCCAGGCGGGTGCTTCTCGACGCACTTGCTCCCGGAGG CTGCGCCCCGGCGCTGGAACCCGAGGTGGGAGGACCGGTTGGTGTCACCCTGCTCGGCCCTCAGCCCTGCCGCG TGGGGCGCGTGGGCACGGAGCTTCCTGCCTCTGCTCCGACACCCGGCAAGCAGCCGGAGACAAAACGCCTTAA GGGTGCCCTGGAGGCTGCCGGGCAGAGTGGAGCAGCTTGGGGCCGTGCCCAGGGCGGTGGCTGTGAGTCTAGTTT $\verb|TTGCTTTACCAAGTGTACAGAAATGGCATTTACGTTTCTCTGATGCTCCCTTGAAGCCATAGAATTTAGGGGCCTT|$ TTTTAAAAAAATAAAAGAAAAATGAAACCAAAAAAAAA

605/2825 FIGURE 542

 ${\tt MSINTHLGKEQSRRDDLEALGHMFMYFLRGSLPWQGLKADTLKERYQKIGDTKRATPIEVLCENFPEEMATYLRY} \\ {\tt VRRLDFFEKPDYDYLRKLFTDLFDRSGFVFDYEYDWAGKPLPTPIGTVHTDLPSQPQLRDKTQPPESSPCSPLGR} \\ {\tt DLVRGPRGPPTAAQGQTLAGSQNADCRGRAWLRRPHPRDVGSLPSCKTLAEISTPVSSPPLQEH} \\ {\tt CRUTCH STRUCK STRUCK$

606/2825 FIGURE 543

à

607/2825 FIGURE 544

MPNFSGNWKIIRSENFEELLKVLGVNVMLRKIAVAAASKPAVEIKQEGDTFYIKTSTTVRTTEINFKVGEEFEEQ TVDGRPCKSLVKWESENKMVCEQKLLKGEGPKTSWTRELTNDGELILTMTADDVVCTRVYVRE

608/2825 FIGURE **545**

 ${\tt GCACGCACTGGCCCCGGCGCCCCCCCCCCCCAGAGAGCACTGACACGGCTCCCGGGACCTCGGCAGGA}$ AGAAGATCGTGCAGAAGTATGGCTACACCCACCTCTCCACCGGGGACCTCCTGCGGTCCGAGGTCAGCTCAGGCT CGGCCAGGGGCAAGAAGCTGTCGGAAATCATGGAGAAGGGGCAGCTGGTTCCACTGGAGACAGTGTTGGACATGC AAGGAGAAGAGTTTGAGCGACGGATTGGACAGCCCACACTGCTGCTGTATGTGGACGCAGGCCCTGAGACCATGA CCCAGCGGCTCTTGAAACGTGGAGAGCCAGCGGGCGTGTGGACGACAATGAGGAGACCATCAAAAAGCGGCTGG AGACCTATTACAAGGCCACAGAACCCGTCATCGCCTTCTATGAGAAACGTGGCATTGTGCGCAAGGTCAACGCTG TCCCCAGCTCAGAGCCCCGCCCCACCCGTCCTGATTAGAGGTCCTCCTGGCCTGAGCGCAGCGCCTCCACCCTG CCCTGCTGAGCACAGACGGAGGAAGCCGCTTATCCTGTTTTCATGGACAGCTGAGCACTAAAGGAATTTCTAAGG GCTCATGTTCAGGCAGAACCGGTCCCAGCCTGGGCTCCTCTGCATCTTGCTCTGTGCCTTGGCCCTGACCCCCAT CGCTCTGAGCATATGTTCCATGCCTGCCTTGCCGGGGCCTGGACTGCACAGGCAGCAAGGTCATGGTCTGAGTGG GGAGGCCCAATGAGGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAAGCTGAGGCAGGAGGATCACCTGAGGTC AGGAGTTCGAGAGCAGCCTGGCCAACATGGCAAAACCCCTTATTTACTAAAAATACAAAAACTTAGCCGGGCATG GTGGCATGTGCCTGTATTCCCAGCTACTCATGAGGCTGAGGCAGGAGAATGGCGTGAACCCGGGAGTGGAGCTTG AAAAAAGAAATTAATTGGGGGAGTCATGGTCAGGGGTGAGACCTGAAGGACCTCCCCCTGTGTGGCCCTGGACAC AGCCCACCTCTGTGAGCCGTTTCCAATTCTAAAACAGACTCAATGTCCCCCTCACCCCACCTCAAGGTCAGGA TGCGAACACTGAGTGAGGAGTGGACGCTGTCCATTGCCACGGCCATGAGGGCTGGAGACCAGAACAGCATGGC $\verb|CCGAAGCGTGCGGGGCCCCGGATGACTTGGGGGACACCCCAGAATCCCCTGGGGAGAACCCTTCCTGCGCGCTTTC|\\$ ATTTTTTGACCTCATCACTGAGAAAGGCTCAATTTGGTGCTCACGTGTCCTTAACACCTGATCTGGCCCAAGCTG CGTGCCCTTTAAGCCAAGAGAGCCTCTTGTGGACCCCGCCTGCCCGAATGAAATCCGAACAGTTGGGGCTGTTAT GGCAAGTGGGGCTGGTTTTTCATTTCCATTGGTTATTTAAAGTTTCCTTTAAAATAAACGATTTTAAGTTATAAA AGGTGAATCTATTGAAAGAAGAACATCAAAGAAATAAACAGGAGTTCAGCGGAGTAGCAGAAGACAAGGCATGTA GGGGGAGCCATTCTGTCCCAG

609/2825 FIGURE 546

 ${\tt MEEKLKKTKIIFVVGGPGSGKGTQCEKIVQKYGYTHLSTGDLLRSEVSSGSARGKKLSEIMEKGQLVPLETVLDMLRDAMVAKVNTSKGFLIDGYPREVQQGEEFERRIGQPTLLLYVDAGPETMTQRLLKRGETSGRVDDNEETIKKRLETYKATEPVIAFYEKRGIVRKVNAEGSVDSVFSQVCTHLDALK$

610/2825 FIGURE 547

CATGACGGAGGCGGTGCCGTTGCCGCCGCTGCCGTCGCAGGGGGGGAGTCGGGTTCCCAGAAAGTAGC $\verb|TIGATG| AGTGTCCAAAGTAGCAGTGGAAGTTTGGAGGGGCCGCCATCTTGGTCCCAGCTCTCCACGTCTCCAACC| \\$ CCGGGCTCGGCGGCGGCCAGGTCCCTGCTGAATCACACGCCGCCATCCGGGAGGCCCAGGGAAGGTGCAATG GATGAGCTTCATAGTCTGGATCCAAGAAGGCAAGAGTTATTGGAAGCTAGATTTACTGGAGTTGCAAGTGGGAGC ACTGGAAGTACGGGCAGTTGCAGTGTTGGTGCTAAAGCCACAACAATAACGAAAGCTCTAATCACAGTTTTGGA AGCTTGGGATCTTTAAGTGACAAAGAATCAGAGACACCGGAGAAGAAACAATCGGAATCATCCAGGGGAAGAAAG AGAAAAGCAGAAAACCAGAATGAAAGTAGTCAGGGAAAAAGTATTGGGGGACGTGGCCACAAAATTAGCGACTAT TTTGAATACCAGGGTGGAAATGGCTCAAGTCCAGTAAGAGGCATACCTCCTGCAATCCGTTCTCCTCAAAATTCA CATTCACATTCCACTCCTCCTCATCTGTTCGACCGAATAGCCCTTCTCCTACTGCATTAGCATTTGGGGACCAC CCTATTGTACAACCAAAGCAATTATCCTTTAAAATTATTCAGACTGATCTCACAATGCTGAAATTAGCAGCATTA GAAAGTAATAAAATCCAGGACCTGGAAAAGAAGGAGGGACGTATAGATGATTTGCTCAGGGCTAACTGTGATCTC AGACGCCAAATAGATGAACAAAAATTACTTGAAAAATACAAAGAACGATTAAATAAGTGCATATCAATGAGC CTCGGGCACTTTACAACAGTTAGACATGGCGCTTCATTTACTGAACAATGGACAGATGGTTTTGCATTTCAGAAT CTTGTGAAGCAACAAGAATGGGTGAATCAGCAAAGGGAAGATATTGAAAGGCAAAGGAAACTTCTAGCCAAACGC AAACCTCCCACAGCTAATAATTCTCAGGCACCCTCTACCAATTCTGAACCAAAACAAAGGAAAAACAAAGCAGTC AATGGAGCAGAGAATGATCCCTTTGTTAGACCAAATTTACCACAACTGTTGACTTTGGCAGAATATCATGAACAG GAAGAAATTTTCAAACTTAGACTAGGACATCTCAAAAAGGAAGAGGCAGAAATCCAGGCAGAACTTGAACGTTTG GAAAGAGTCAGAAATCTTCACATACGTGAGCTGAAAAGAATAAACAATGAAGATAATTCACAGTTCAAAGATCAC CCAACATTAAATGAAAGATATTTATTACTTCATCTGCTTGGTAGAGGTGGCTTTAGTGAAGTGTATAAGGCTTTT GACCTTTATGAACAAAGATATGCTGCTGTGAAGATACATCAGCTTAATAAAAGCTGGAGAGATGAGAAAAAGAA AACTACCACAAACATGCCTGCAGAGAGTATAGAATACACAAAGAACTGGATCACCCCAGAATAGTTAAACTCTAT GATTATTTCTCCTTGGATACAGATACGTTTTGTACAGTGTTAGAATACTGTGAAGGCAATGACTTGGATTTCTAT CTGAAGCAACAAGTTAATGTCAGAGAAAGAAGCTCGGTCTATTGTAATGCAGATTGTAAATGCACTAAGATAT CTCAATGAGATCAAACCCCCTATTATACATTATGATCTTAAGCCAGGAAACATCCTACTGGTAGATGGAACAGCA TGTGGTGAAATCAAAATCACTGATTTTGGTCTGTCCAAGATTATGGATGATAGCTATGGTGTAGATGGAATG GATCTAACTTCCCAGGGGGCAGGCACTTACTGGTATTTACCTCCTGAGTGTTTTGTAGTTGGAAAAGAGCCACCA AAGATTTCCAACAAGGTTGATGTATGGTCGGTTGGAGTCATCTTCTTTCAGTGTCTTTATGGTAGAAAGCCATTT GGTCACAATCAATCTCAACAAGACATTCTTCAAGAAAATACAATATTAAAAGCCACAGAAGTCCAGTTCCCTGTA AAACCGGTTGTAAGCAGTGAAGCCAAGGCATTTATAAGACGCTGTTTGGCATATCGAAAAGAAGATCGATTTGAT GTGCACCAGCTGGCAAATGACCCATACCTTCTCCCACACATGAGAAGATCAAATTCTTCAGGAAACCTACACATG TTTTTTTTTTTTTTACACAAGACGTGGTTAAAGAACTGTTTGTGACTGAAGTTCCTCATAGTGTCATTGGTAT

611/2825 FIGURE 548

MSVQSSSGSLEGPPSWSQLSTSPTPGSAAAARSLLNHTPPSGRPREGAMDELHSLDPRRQELLEARFTGVASGST GSTGSCSVGAKASTNNESSNHSFGSLESLSDKESETPEKKQSESSRGRKRKAENQNESSQGFPNLPVFQSLAYWE MGRTAGGKSIGGRGHKISDYFEYQGGNGSSPVRGIPPAIRSPQNSHSHSTPSSSVRPNSPSPTALAFGDHPIVQP KQLSFKIIQTDLTMLKLAALESNKILDLEKKEGRIDDLLRANCDLRRQIDEQQKLLDKYKERLNKCISMSKKLLI EKSTQEKLSSREKSMQDRLRLGHFTTVRHGASFTEQWTDGFAFQNLVKQQEWVNQQREDIERQRKLLAKRKPPTA NNSQAPSTNSEPKQRKNKAVNGAENDPFVRPNLPQLLTLAEYHEQEEIFKLRLGHLKKEEAGIQAELERLERVRN LHIRELKRIHNEDNSQFKDHPTLNERYLLLHLLGRGGFSEVDKAFDLSEQRYAAVKIHQLNKSWRDEKKENYHKH ACREYRIHKELDHPRIVKLYDYFSLDTDTFCTVLEYCEGNDLDFYLKQHKLMSEKEARSIVMQIVNALRYLNEIK PPIIHYDLKPGNILLVDGTACGEIKITDFGLSKIMDDDSYGVDGMVLTSQGAGTYWYLPPECFVVGKEPPKISNK VDVWSVGVIFYQCLYGRKPFGHNQSQQDILQENTILKATEVQFPVKPVVSSEAKAFIRRCLAYRKEDRFDVHQLA CDPYLLPHMRRSNSSGNLHMAGLTASPTPPSSSIITY

612/2825 FIGURE **549**

GGATGTATAAAATCAAAAGGGAAAGACAGCTTGAGTGACGATGGAGTAGATTTGAAGACTCAACCAGTACGTAAT ACTGAAAGAACTATTTATGTGAGAGATCCAACGTCCAATAAACAGCAAAGGCCAGTTCCAGAATCTCAGCTTTTA CCTGGACAGAGGTTTCAAACTAAAGATCCAGAGGAACAAGGAGACATTGTGGTAGCCCTTGTACCCCTATGATGGC ATCCACCCGGACGACTTGTCTTTCAAGAAAGGAGAGAAGATGAAAGTCCTGGAGGAGCATGGAGAATGGTGGAAA GCAAAGTCCCTTTTAACAAAAAAAGGAGCTTCATCCCCAGCAACTATGTGGCCAAACTCAACACCTTAGAAACA GAAGAGTGGTTTTTCAAGGATATAACCAGGAAGGACGCAGAAAGGCAGCTTTTGGCACCAGGAAATAGCGCTGGA GGTGATGTTATTAAGCACTACAAAATTAGAAGTCTGGATAATGGGGGGCTATTACATCTCTCCACGAATCACTTTT ATTAGTCCCAAGCCACAGAAGCCATGGGATAAAGATGCCTGGGAGATCCCCCGGGAGTCCATCAAGTTGGTGAAA AGGCTTGGCGCTGGGCAGTTTGGGGAAGTCTGGATGGGTTACTATAACAACAGTACCAAGGTGGCTGTGAAAACC CTGAAGCCAGGAACTATGTCTGTGCAAGCCTTCCTGGAAGAAGCCAACCTCATGAAGACCCTGCAGCATGACAAG CTCGTGAGGCTCTACGCTGTGGTCACCAGGGAGGAGCCCATTTACATCATCACCGAGTACATGGCCAAGGGCAGT TTGCTGGATTTCCTGAAGAGCGATGAAGGTGGCAAAGTGCTGCTTCCAAAGCTCATTGACTTTTCTGCTCAGATT GCAGAGGGAATGGCATACATCGAGCGGAAGAACTACATTCACCGGGACCTGCGAGCAGCTAATGTTCTGGTCTCC GAGTCACTAATGTGCAAAATTGCAGATTTTGGCCTTGCTAGAGTAATTGAAGATAATGAGTACACAGCAAGGGAA GGTGCTAAGTTCCCTATTAAGTGGACGGCTCCAGAAGCAATCAACTTTGGATGTTTCACTATTAAGTCTGATGTG TGGTCCTTTGGAATCCTCCTATACGAAATTGTCACCTATGGGAAAATTCCCTACCCAGGGAGAACTAATGCCGAC GTGATGACCGCCTGTCCCAGGGCTACAGGATGCCCCGTGTGGAGAACTGCCCAGATGAGCTCTATGACATTATG AAAATGTGCTGGAAAGAAAAGGCAGAAGAGAGACCAACGTTTGACTACTTACAGAGCGTCCTGGATGATTTCTAC ACAGCCACGGAAGGGCAATACCAGCAGCAGCCT**TAG**AGCACAGGGAGACCCGTCCATTTGGCAGGGGTGGCTGCC TCATTTAGAGAGGAAAAGTAACCATCACTGGTTGCACTTATGATTTCATGTGCGGGGATCATCTGCCGTGCCTGG ATCCTGAAATAGAGGCTAAATTACTCAGGAAGAACACCCTCTAAATGGGAAAGTATTCTGTACTCTTAGATGGAT TCTCCACTCAGTTGCAACTTGGACTTGTCCTCAGCAGCTGGTAATCTTGCTCTGCTTGACAACATCTGAGTGCAG CCGTTTGAGAAGAAACATCTATTCTCTCCAAAAATGCACCCAACTAGCTCTATGTTTACAAATGGACATAGGAC TCAAAGTTTCAGAGACCATTGCAATGAATCCCCAATAATTGCAGAACTAAACTCATTTATAAAGCTAAAATAACC GGATATATACATAGCATGACATTTCTTTGTGCTTTGGCTTACTTGTTT

FIGURE 550

MGCIKSKGKDSLSDDGVDLKTQPVRNTERTIYVRDPTSNKQQRPVPESQLLPGQRFQTKDPEEQGDIVVALYPYD GIHPDDLSFKKGEKMKVLEEHGEWWKAKSLLTKKEGFIPSNYVAKLNTLETEEWFFKDITRKDAERQLLAPGNSA GAFLIRESETLKGSFSLSVRDFDPVHGDVIKHYKIRSLDNGGYYISPRITFPCISDMIKHYQKQADGLCRRLEKA CISPKPQKPWDKDAWEIPRESIKLVKRLGAGQFGEVWMGYYNNSTKVAVKTLKPGTMSVQAFLEEANLMKTLQHD KLVRLYAVVTREEPIYIITEYMAKGSLLDFLKSDEGGKVLLPKLIDFSAQIAEGMAYIERKNYIHRDLRAANVLV SESLMCKIADFGLARVIEDNEYTAREGAKFPIKWTAPEAINFGCFTIKSDVWSFGILLYEIVTYGKIPYPGRTNA DVMTALSQGYRMPRVENCPDELYDIMKMCWKEKAEERPTFDYLQSVLDDFYTATEGQYQQQP

614/2825 FIGURE **551**

GAATTCCTGCAGCTCAGCAGCCGCCGCCAGAGCAGGACGAACCGCCAATCGCAAGGCACCTCTGAGAACTTCAGG **ATG**CAGATGTCTCCAGCCCTCACCTGCCTAGTCCTGGGCCTTGTCTTTGGTGAAGGGTCTGCTGTGCAC CATCCCCATCCTACGTGGCCCACCTGGCCTCAGACTTCGGGGTGAGGGTGTTTCAGCAGGTGGCGCAGGCCTCC AAGGACCGCAACGTGGTTTTCTCACCCTATGGGGTGGCCTCGGTGTTGGCCATGCTCCAGCTGACAACAGGAGGA GAAACCCAGCAGCAGATTCAAGCAGCTATGGGATTCAAGATTGATGACAAGGGCATGGCCCCCGCCCTCCGGCAT CTGTACAAGGAGCTCATGGGGCCATGGAACAAGGATGAGATCAGCACCACAGACGCGATCTTCGTCCAGCGGGAT GGGAAAGGAGCCGTGGACCAGCTGACACGGCTGGTGCTGGTGAATGCCCTCTACTTCAACGGCCAGTGGAAGACT CCCTTCCCCGACTCCAGCACCCACCGCCGCCTCTTCCACAAATCAGACGGCAGCACTGTCTCTGTGCCCATGATG GCTCAGACCAACAAGTTCAACTATACTGAGTTCACCACGCCCGATGGCCATTACTACGACATCCTGGAACTGCCC ATTCTGAGTGCCCAGCTCATCAGCCACTGGAAAGGCAACATGACCAGGCTGCCCGCCTCCTGGTTCTGCCCAAG TTCTCCCTGGAGACTGAAGTCGACCTCAGGAAGCCCCTAGAGAACCTGGGAATGACCGACATGTTCAGACAGTTT CAGGCTGACTTCACGAGTCTTTCAGACCAAGAGCCTCTCCACGTCGCGCAGGCGCTGCAGAAAGTGAAGATCGAG GTGAACGAGAGTGGCACGGTGGCCTCCTCATCCACAGCTGTCATAGTCTCAGCCCGCATGGCCCCGAGGAGATC ATCATGGACAGACCCTTCCTCTTTGTGGTCCGGCACAACCCCACAGGAACAGTCCTTTTCATGGGCCAAGTGATG GAACCC**TGA**CCCTGGGGAAAGACGCCTTCATCTGGGACAAAACTGGAGATGCATCGGGAAAGAAGAAACTCCGAA GAAAAGAATTTTAGTGTTAATGACTCTTTCTGAAGGAAGAGAGACATTTGCCTTTTGTTAAAAGATGGTAAACC AGATCTGTCTCCAAGACCTTGGCCTCTCCTTGGAGGACCTTTAGGTCAAACTCCCTAGTCTCCACCTGAGACCCT GGGAGAGAGTTTGAAGCACAACTCCCTTAAGGTCTCCAAACCAGACGGTGACGCCTGCGGGACCATCTGGGGCA CCTGCTTCCACCCGTCTCTCTGCCCACTCGGGTCTGCAGACCTGGTTCCCACTGAGGCCCTTTGCAGGATGGAAC TACGGGGCTTACAGGAGCTTTTGTGTGCCTGGTAGAAACTATTTCTGTTCCAGTCACATTGCCATCACTCTTGTA CTGCCTGCCACCGCGGAGGAGGCTGGTGACAGGCCAAAGGCCAGTGGAAGAAACACCCTTTCATCTCAGAGTCCA CTGTGGCACTGGCCACCCCTCCCCAGTACAGGGGTGCTGCAGGTGGCAGAGTGAATGTCCCCCATCATGTGGCCC AACTCTCCTGGCCTGGCCATCTCCCTCCCCAGAAACAGTGTGCATGGGTTATTTTTGGAGTGTAGGTGACTTGTTT ACTCATTGAAGCAGATTTCTGCTTCCTTTTATTTTTATAGGAATAGAGGAAGAAATGTCAGATGCGTGCCCAGCT CTTCACCCCCAATCTCTTGGTGGGGAGGGGTGTACCTAAATATTTATCATATCCTTGCCCTTGAGTGCTTGTTA GAGAGAAAGAGAACTACTAAGGAAAATAATATTATTTAAACTCGCTCCTAGTGTTTCTTTGTGGTCTGTGTCACC GTATCTCAGGAAGTCCAGCCACTTGACTGGCACACCCCCTCCGGACATCCAGCGTGACGGAGCCCACACTGCCA ATACAATTTCATCCTCCTTCAGGGGATCAAAAGGACGGAGTGGGGGGACAGAGACTCAGATGAGGACAGAGTGGT TTCCAATGTGTTCAATAGATTTAGGAGCAGAAATGCAAGGGGCTGCATGACCTACCAGGACAGAACTTTCCCCAA CACGTGAGGGGGGGGGGGGGAGAGAGACAGCCCGGATTCAACTACCTTAGATAATATTTCTGAAAACCTA AATATATTTTCTAATATCTTTAAATATATATATATATTTTTAAAGACCAATTTATGGGAGAATTGCACACAGATG TGAAATGAATGTAATCTAATAGAAGC

615/2825 FIGURE 552

$$\label{tolic} \begin{align} MQMSPALTCLVLGLALVFGEGSAVHHPPSYVAHLASDFGVRVFQQVAQASKDRNVVFSPYGVASVLAMLQLTTGG\\ ETQQQIQAAMGFKIDDKGMAPALRHLYKELMGPWNKDEISTTDAIFVQRDLKLVQGFMPHFFRLFRSTVKQVDFS\\ EVERARFIINDWVKTHTKGMISNLLGKGAVDQLTRLVLVNALYFNGQWKTPFPDSSTHRRLFHKSDGSTVSVPMM\\ AQTNKFNYTEFTTPDGHYYDILELPYHGDTLSMFIAAPYEKEVPLSALTNILSAQLISHWKGNMTRLPRLLVLPK\\ FSLETEVDLRKPLENLGMTDMFRQFQADFTSLSDQEPLHVAQALQKVKIEVNESGTVASSSTAVIVSARMAPEEI\\ IMDRPFLFVVRHNPTGTVLFMGQVMEP\\ \end{align*}$$

616/2825 FIGURE 553

617/2825 FIGURE 554

MGKWHVGGRRGSPRQWGATARGRDLEAVRRGGCGSVGRRRQRRRRRRRRRRRRRMRRMWATQGLAVRVALSVLPGSR ALRPGDCEVCISYLGRFYQDLKDRDVTFSPATIENELIKFCREARGKENRLCYYIGATDDAATKIINEVSKPLAH HIPVEKICEKLKKKDSQICELKYDKQIDLSTVDLKKLRVKELKKILDDWGETCKGCAEKSDYIRKINELMPKYAP KAASAPTDL

618/2825 FIGURE 555

619/2825 FIGURE 556

MLKPALEPRGGFSFENCQRNASLERVLPGLKVPHARKTGTTIAGLVFQDGVILGADTRATNDSVVADKSCEKIHF IAPKIYCCGAGVAADAEMTTRMVASKMELHALSTGREPRVATVTRILRQTLFRYQGHVGASLIVGGVDLTGPQLY GVHPHGSYSRLPFTALGSGQDAALAVLEDRFQPNMTLEAAQGLLVEAVTAGILGDLGSGGNVDACVITKTGAKLL RTLSSPTEPVKRSGRYHFVPGTTAVLTQTVKPLTLELVEETVQAMEVE

620/2825 FIGURE **557**

ATCCGCGGCTACGTGGGCAACCGGGCGGCCACGTTCCCGCTGCAGGTTTTGGGATTTGAGATTGACGCGGTGAAC TCTGTCCAGTTTTCAAACCACACGGCTATGCCCACTGGAAGGGCCCAAGTGCTGAATTCAGATGAGCTCCAGGAG TTGTACGAAGGCCTGAGCCTGAACAACATGAATAAATATGACTACGTGCTCACAGGTTATACGAGGGACAAGTCG TTCCTGGCCATGGTGGTGGACATTGTGCAGGAGCTGAAGCAGCAGAACCCCAGGCTGGTGTACGTGTGTGATCCA GTCTTGGGTGACAAGTGGGACGGCGAAGGCTCGATGTACGTCCCGGAGGACCTCCTTCCCGTCTACAAAGAAAAA GTGGTGCCGCTTGCAGACATTATCACGCCCAACCAGTTTGAGGCCGAGTTACTGAGTGGCCGGAAGATCCACAGC CAGGAGGAAGCCTTGCGGGTGATGGACATGCTGCACTCTATGGGCCCCGACACCGTGGTCATCACCAGCTCCGAC $\verb|CTGCCCTCCCGCAGGGCAGCAACTACCTGATTGTGCTGGGGAGTCAGAGGAGGAGGAATCCCGCTGGCTCCGTG| \\$ GTGATGGAACGCATCCGGATGGACATTCGCAAAGTGGACGCCGTCTTTGTGGGCACTGGGGACCTGTTTGCTGCC ATGCTCCTGGCGTGGACACAAGCACCCCAATAACCTCAAGGTGGCCTGTGAGAAGACCGTGTCTACCTTGCAC CACGTTCTGCAGAGGACCATCCAGTGTGCAAAAGCCCAGGCCGGGGAAGGAGTGAGGCCCAGCCCCATGCAGCTG $\texttt{GAGCTGCGGATGGTGCAGAGCAAAAGGGACCATCGAGGACCCAGAGATCGTCGTCCAGGCCACGGTGCTG} \textbf{\underline{TGA}} \textbf{\underline{GGG}}$ CCCCGCCGCTTGCCCGTGACACGCAGCGCGTTGGTGTCTCCGTGTTTGTCCCTGTGAAAACATGTAACGTCTGCC TTAGAGCCATGACCGAAACTTGATATTTTTTTTTTTCATGAGTGTCCGGCATCTGCTGGTCTTCATTGTGAAACG

621/2825 FIGURE 558

MEEECRVLSIQSHVIRGYVGNRAATFPLQVLGFEIDAVNSVQFSNHTGYAHWKGQVLNSDELQELYEGLRLNNMN KYDYVLTGYTRDKSFLAMVVDIVQELKQQNPRLVYVCDPVLGDKWDGEGSMYVPEDLLPVYKEKVVPLADIITPN QFEAELLSGRKIHSQEEALRVMDMLHSMGPDTVVITSSDLPSPQGSNYLIVLGSQRRNPAGSVVMERIRMDIRK VDAVFVGTGDLFAAMLLAWTHKHPNNLKVACEKTVSTLHHVLQRTIQCAKAQAGEGVRPSPMQLELRMVQSKRDI EDPEIVVQATVL

622/2825 FIGURE 559

CCTGCCTGTCCCTCCTGGGTCACTGGTGTTTGAGGATTTTGCTAACCTGACGCCCTTTGTCAAGGAAGAGCTGA GGTTTGCCATCCAGAACAAGCACCTCTGCCACCGGATGTCCTCTGCGCTGGAATCAGTCACTGTCAGCGACAGAC ATAAGATTGCAGCTGCAAAGTGCCGAAACAAGAAGAAGAAGAAGAAGACGGAGTGCCTGCAGCTTCAGTAT**TAG**CAGA GCCACAGGCCGCCTCTGTGGCATCACCAGGGTTTCTCTGAAGAGAGGGGTCTGCATTTTCCTAAACCCAGTGCTG CTCTCCCATCTCCCATCTTCCTCTCGCAGCTTGATGAGCCCCGGTGTGTCCCAGGAGTCGGAGAAGCTGGAAAGT GTGAATGCTGAACTGAAGGCTCAGATTGAGGAGCTCAAGAACGAGAAGCAGCATTTGATATACATGCTCAACCTT . CATCGGCCCACGTGTATTGTCCGGGCTCAGAATGGGAGGACTCCAGAAGATGAGAGAAACCTCTTTATCCAACAG ATAAAAGAAGGAACATTGCAGAGCTAAGCAGTCGTGGTATGGGGGGCGACTGGGGAGTCCTCATTGAATCCTCATT TTATACCCAAAACCCTGAAGCCATTGGAGAGCTGTCTTCCTGTGTACCTCTAGAATCCCAGCAGCAGAGAACCAT CAAGGCGGGAGGCCTGCAGTGATTCAGCAGGCCCTTCCCATTCTGCCCCAGAGTGGGTCTTGGACCAGGGCAAG TGCATCTTTGCCTCAACTCCAGGATTTAGGCCTTAACACACTGGCCATTCTTATGTTCCAGATGGCCCCCAGCTG GTGTCCTGCCCGCCTTTCATCTGGATTCTACAAAAAACCAGGATGCCCACCGTTAGATTCAGGCAGCAGTGTCTG TACCTCGGGTGGGAGGGATGGGGCCATCTCCTTCACCGTGGCTACCATTGTCACTCGTAGGGGATGTGGAGTGAG AACAGCATTTAGTGAAGTTGTGCAACGGCCAGGGTTGTGCTTTCTAGCAAATATGCTGTTATGTCCAGAAATTGT CCAGAAGAGCTTGTCAGCAAGAGGGAACAGAATTCTCCCAGCGTTAACACAAAATCCATGGGCAGCATGATGG CAGGTCCTCTGTTGCAAACTCAGTTCCAAAGTCACAGGAAGAAAGCAGAAAGTTCAACTTCCAAAGGGTTAGGAC TCTCCACTCAATGTCTTAGGTCAGGAGTTGTGTCTAGGCTGGAAGAGCCAAAGAAATATTCCATTTTCCTTTCCT ATTGGATGTCAAAAGCATTTTTTTTGTCATGTAGCTGTTTTAAGAAATCTGGCCCAGGGTGTTTGCAGCTGTGAG AAGTCACTCACACTGGCCACAAGGACGCTGGCTACTGTCTATTAAAATTCTGATGTTTCTGTGAAATTCTCAGAG ACCTGTCAGAATAATAAATATTGTGGTAAAA

623/2825 FIGURE 560

 ${\tt MMLQHPGQVSASEVSASAIVPCLSPPGSLVFEDFANLTPFVKEELRFAIQNKHLCHRMSSALESVTVSDRPLGVSITKAEVAPEEDERKKRRRERNKIAAAKCRNKKKEKTECLQLQY}$

624/2825 FIGURE 561

625/2825 FIGURE 562

 $\label{thm:composition} MAAVVALSLRRRLPATTLGGACLQASRGAQTAAATAPRIKKFAIYRWDPDKAGDKPHMQTYKVDLNKCGPMVLDA\\ LIKIKNEVDSTLTFRRSCREGICGSCAMNINGGNTLACTRRIDTNLNKVSKIYPLPHMYVIKDLVPDLSNFYAQY\\ KSIEPYLKKKDESQEGKQQYLQSIEEREKLDGLYECILCACCSTSCPSYWWNGDKYLGPAVLMQAYRWMIDSRDD\\ FTEERLAKLQDPFSLYRCHTIMNCTRTCPKGLNPGKAIAEIKKMMATYKEKKASV$

626/2825 FIGURE 563

CCAGAGCCGCAGCCGCCGCCTACAGTCCGGGCCGGGCTCCACCGCGCATCCTGCTCCACTCTGGCGACCG CGGTGCAGTTCGAGAAGGCGAACCCTGTCAACTGCGTCTTCTTCGATGAGGCCCAACAAGCAGGTTTTTGCTGTTC GATCTGGTGGAGCTACTGGCGTGGTAGTTAAAGGCCCAGATGATAGGAATCCCATCTCATTTAGAATGGATGACA AAGGAGAAGTGAAGTGCATTAAGTTTTCCTTAGAAAATAAGATATTGGCTGTTCAGAGGACCTCAAAGACTGTGG ATTTTTGTAATTTTATCCCTGATAATTCCCAGCTGGAATACACACAGGAGTGCAAGACTAAGAATGCCAACATTC TAGGATTCTGCTGGACTAGTTCAACTGAAATTGTCTTCATAACAGATCAAGGAATCGAATTTTACCAGGTATTAC CAGAGAAACGGAGTCTGAAACTCTTGAAGAGCCACAATCTCAATGTGAATTGGTACATGTACTGCCCCGAGCGCG $\verb|CCGTGATCTTGCTGTCTACCACGGTCCTGGAGAATGTCCTGCAGCCTTTTCACTTTAGGGCTGGCACTATGTCGA| \\$ AGCTGCCCAAGTTTGAGATTGAATTACCAGCTGCGCCTAAGTCAACTAAACCCAGCCTTTCCGAAAGAGACATCG CAATGGCTACCATATACGGGCAGCTGTATGTTCTCTTCTTGAGGCATCATTCTCGGACCTCCAACAGCACAGGAG CGGAGGTGGTCCTCTATCATCTACCACGAGAAGGTGCCTGTAAAAAGATGCACATATTGAAGTTAAATAGGACGG GAAAGTTTGCCCTGAACGTGGTGGACAACCTGGTAGTCGTGCATCATCAGGATACAGAGACATCGGTAATATTCG CTTGGATTGTCTTTCAACCTGACATCATTATCAGCGCAAGCCAAGGTTACCTCTGGAACCTCCAAGTGAAACTTG AGCCCATAGTAAATCTCTTACCAGACAAAGGAAGACTCATGGACTTTCTCCTCCAGAGAAAGGAATGCAAGATGG ATAAACTCAACCATGAGTATAAAAAGTACCTGGATGCCGAGCAGAGTTATGCGATGGCGGTGGAAGCAGGGCAGA GCCGAAGCAGCCCGCTCCTCAAGAGGCCGGTGCGGACCCAGGCGGTGCTGGACCAGTCAGATGTGTACACCCATG TCCTGTCAGCCTTCGTGGAAAAGAAGAAGAAGCCTCATAAATTTGTGATAGCCGTGCTGATGGAATACATTCGTT CTCTTAACCAGTTTCAGATTGCAGTACAGCATTACCTACATGAACTTGTTATCAAAACCCTTGTCCAGCACAACC ${\tt TCTTTTATATGCTGCATCAGTTCCTGCAGTACCACGTCCTCAGCGACTCCAAACCTTTGGCTTGTCTGCTGTTAT}$ CCCTAGAGAGTTTCTATCCTCCTGCTCATCAGCTATCTCTGGACATGCTGAAGCGACTTTCAACAGCAAATGATG AAATAGTAGAAGTTCTCCTTTCCAAACACCAAGTGTTAGCTGCCTTAAGGTTTATCCGGGGCCATTGGTGGCCATG ACAACATTTCTGCACGAAAATTTTTAGATGCTGCAAAGCAGACTGAAGACAACATGCTTTTCTATACAATATTCC GCTTTTTTGAACAGCGAAACCAGCGTTTGCGAGGGAGCCCCAATTTCACACCAGGGGAACACTGTGAAGAACATG $\tt TTGCTTTTTCAAACAGATTTTTGGAGACCAAGCTCTAATGAGGCCTACAACATTC \textbf{\textit{TGA}} AATCACTTGCTGTTTT$ TTTATATAAAAATGTGTACAAAGTTAATTTATTGCATTAATAAAGCTCTTTAAACTAT

627/2825 FIGURE 564

MGEEDYYLELCERPVQFEKANPVNCVFFDEANKQVFAVRSGGATGVVVKGPDDRNPISFRMDDKGEVKCIKFSLE
NKILAVQRTSKTVDFCNFIPDNSQLEYTQECKTKNANILGFCWTSSTEIVFITDQGIEFYQVLPEKRSLKLLKSH
NLNVNWYMYCPERAVILLSTTVLENVLQPFHFRAGTMSKLPKFEIELPAAPKSTKPSLSERDIAMATIYGQLYVL
FLRHHSRTSNSTGAEVVLYHLPREGACKKMHILKLNRTGKFALNVVDNLVVVHHQDTETSVIFDIKLRGEFDGSV
TFHHPVLPARSIQPYQIPITGPAAVTSQSPVPCKLYSSSWIVFQPDIIISASQGYLWNLQVKLEPIVNLLPDKGR
LMDFLLQRKECKMVILSVCSQMLSESDRASLPVIATVFDKLNHEYKKYLDAEQSYAMAVEAGQSRSSPLLKRPVR
TQAVLDQSDVYTHVLSAFVEKKEMPHKFVIAVLMEYIRSLNQFQIAVQHYLHELVIKTLVQHNLFYMLHQFLQYH
VLSDSKPLACLLLSLESFYPPAHQLSLDMLKRLSTANDEIVEVLLSKHQVLAALRFIRGIGGHDNISARKFLDAA
KQTEDNMLFYTIFRFFEQRNQRLRGSPNFTPGEHCEEHVAFFKQIFGDQALMRPTTF

628/2825 FIGURE 565

 $\verb|CCTCACTGACTATAAAAGAATAGAGAAGGGAAGGGCTTCAGTGACCGGCTGCCTGGCTGACTTACAGCAGTCAGAC| \\$ TTCACAGTGCTCCTGCAGTCTCTCTGTGTGGCTGTAACTTACGTGTACTTTACCAACGAGCTGAAGCAGATGCAG GACAAGTACTCCAAAAGTGGCATTGCTTGTTTCTTAAAAGAAGATGACAGTTATTGGGACCCCAATGACGAAGAG AGTATGAACAGCCCCTGCTGGCAAGTCAAGTGGCAACTCCGTCAGCTCGTTAGAAAGATGATTTTGAGAACCTCT GAGGAAACCATTTCTACAGTTCAAGAAAAGCAACAAAATATTTCTCCCCTAGTGAGAGAAAGAGGTCCTCAGAGA GTAGCAGCTCACATAACTGGGACCAGAGGAAGAAGCAACACATTGTCTTCTCCAAACTCCAAGAATGAAAAGGCT GGTGAACTGGTCATCCATGAAAAAGGGTTTTACTACATCTATTCCCAAACATACTTTCGATTTCAGGAGGAAATA AAAGAAACACAAAGAACGACAAACAAATGGTCCAATATATTTACAAATACACAAGTTATCCTGACCCTATATTG $\verb|TTGATGAAAAGTGCTAGAAATAGTTGTTGGTCTAAAGATGCAGAATATGGACTCTATTCCATCTATCAAGGGGGGA|$ ATATTTGAGCTTAAGGAAAATGACAGAATTTTTGTTTCTGTAACAAATGAGCACTTGATAGACATGGACCATGAA CACTTATCCCAAGAAAATGAAATTGCTGAAAGATCTTTCAGGACTCTACCTCATATCAGTTTGCTAGCAGAAATC TAGAAGACTGTCAGCTTCCAAACATTAATGCAATGGTTAACATCTTCTGTCTTTATAATCTACTCCTTGTAAAGA CTGTAGAAGAAAGCGCAACAATCCATCTCTCAAGTAGTGTATCACAGTAGTAGCCTCCAGGTTTCCTTAAGGGAC AACATCCTTAAGTCAAAAGAGAGAGAGGCACCACTAAAAGATCGCAGTTTGCCTGGTGCAGTGGCTCACACCTG TAATCCCAACATTTTGGGAACCCAAGGTGGGTAGATCACGAGATCAAGAGATCAAGACCATAGTGACCAACATAG TGAAACCCCATCTCTACTGAAAGTGCAAAAATTAGCTGGGTGTGTTGGCACATGCCTGTAGTCCCAGCTACTTGA GAGGCTGAGGCAGGAGAATCGTTTGAACCCGGGAGGCAGAGGTTGCAGTGTGGTGAGATCATGCCACTACACTCC

629/2825 FIGURE 566

MAMMEVQGGPSLGQTCVLIVIFTVLLQSLCVAVTYVYFTNELKQMQDKYSKSGIACFLKEDDSYWDPNDEESMNS PCWQVKWQLRQLVRKMILRTSEETISTVQEKQQNISPLVRERGPQRVAAHITGTRGRSNTLSSPNSKNEKALGRK INSWESSRSGHSFLSNLHLRNGELVIHEKGFYYIYSQTYFRFQEEIKENTKNDKQMVQYIYKYTSYPDPILLMKS ARNSCWSKDAEYGLYSIYQGGIFELKENDRIFVSVTNEHLIDMDHEASFFGAFLVG

630/2825 FIGURE 567

CCCCAGGCCCGCGGGCTGCTGACAGAGATACGCGCCGTGGTGCGCACCGAGCCCTTCCAGGACGGCTACAGCCTG TTTGCTGCAAAGTTCATGAGAAAAAGAAGAAAAGGCCAAGATTGTCGGATGGAAATAATTCATGAGATTGCTGTA CTTGAACTAGCACAAGACAATCCTTGGGTCATTAATTTACATGAAGTTTATGAGACTGCATCAGAAATGATCTTA GATGTTCAAAGACTTATGCGACAGATTTTAGAAGGTGTTCACTTTTTACACACTCGTGATGTAGTTCATCTTGAT TTGAAGCCTCAGAATATTCTGTTGACAAGTGAATCTCCATTGGGTGACATTAAGATTGTTGATTTTGGCCTTTCA AGAATATTGAAGAACAGTGAAGAGCTCCGAGAAATTATGGGTACCCCTGAATATGTGGCTCCTGAAATTCTTAGT TATGATCCTATAAGCATGGCAACAGATATGTGGAGCATTGGAGTGTTAACATATGTCATGCTTACAGGAATATCA CCTTTCTTAGGCAATGATAAACAAGAAACATTCTTAAACATCTCACAGATGAATTTAAGTTATTCTGAGGAAGAA $\tt TTTGATGTTTGTCTGAGTCGGCTGTTGATTTCATCAGGACACTTTTAGTTAAGAAACCTGAAGATCGAGCCACT$ GCTGAAGAATGTCTAAAGCACCCCTGGTTGACACAGAGCAGTATTCAAGAGCCTTCTTTCAGGATGGAAAAGGCA GAGGAATCCATTGTAACCGAAGAGTTAATTGTAGTTACTTCATATACTCTAGGACAATGCAGACAGTCTGAAAAA GAGAAAATGGAGCAAAAGGCCATTTCCAAACGATTTAAATTTGAGGAACCTTTGCTACAAGAAATTCCAGGAGAA TGTGGAGTTAGGTGGAAGCCAGATTTTAAAAGTTGCCAACCAGGATATTTAACAGGTACAGTTACCCGTTTCAAT GTTATTTTTAAGAAGGGAGATGTTGGCACCTTTGAATTCTACATCCTGTTTCTCCAGAATGAGAATTTGTGTACA AAGATATTTGTATTCACTTTCTTTAAAAAATCCAAGTAAAAGTGCCAAAACTACATTTCTGTAAATCTCTTGCAT TATTCATATGTGTATCTATATCTGCATAATGTTTGTTAATGTCTACTAAAATTGCTACTTTTCACTTTGGATTT GTTTTTGGCAAAATTTTAGTCTAAACAGACATCTAAATTTTCGAGACTTAGAATAACATTCACTAAAGTTTGATA ATGTCTTTTTAAATATTTTCTTACTGCTTTATAGTGACTTGATTTGGTTTCTGTTGTTTTTTTGCCTAAATACT AGTAACATATCAGTGAAAAACCCTAATTTTTTTTCTCTCAATGTCACTAGTAAGAGAGGTGGTAATTTTTCACC TCTGAAATTATTCTGGGTTTAGGTGTCAGCTTTTGAGCTGCTTCCCTCATCACACCACACTCACATGCATCTGTT CTCTCTCACACTCTATACCCCTGCCACTTCCTGGCACCTCCCCCCATGCTTGTCATTTAATTTTGGCCACTTGTA GGTATCAGTGTGATCTGATCAACACTCTGGTTACCTTGGTCAGTGAAAAGATGCTACTATATTGCTTTTGTCCCA CTGAGTTTCTTATCAGCCCTCAAGCTATGCTAGGAAAAGTTATAAAAATGCCAAAATATTTATAAACATTTACTTT GTCCATAAAAATTTACATTGGATACTCTGTAAGTAGGAGGTACTTTGTCCCAAAAAGATGTATAAGAATGTACT AATAGTTTTATTTGATTAGGATTGAACAGTTCAGTTGTATCTATGCCCCACAGTGACCAGTAAAGTCCAATTAAA ATATGGAAATGTAAAAGTGTATGCCGAATACCTTAAAGTAACTAATTATCCTTACACACAAAAGGCTCAGTGCAT TAAATATTTGCCTATC

631/2825 FIGURE 568

MIPLEKPGSGGSSPGATSGSGRAGRGLSGPCRPPPPPQARGLLTEIRAVVRTEPFQDGYSLCPGRELGRGKFAVV RKCIKKDSGKEFAAKFMRKRRKGQDCRMEIIHEIAVLELAQDNPWVINLHEVYETASEMILVLEYAAGGEIFDQC VADREEAFKEKDVQRLMRQILEGVHFLHTRDVVHLDLKPQNILLTSESPLGDIKIVDFGLSRILKNSEELREIMG TPEYVAPEILSYDPISMATDMWSIGVLTYVMLTGISPFLGNDKQETFLNISQMNLSYSEEEFDVLSESAVDFIRT LLVKKPEDRATAEECLKHPWLTQSSIQEPSFRMEKALEEANALQEGHSVPEINSDTDKSETEESIVTEELIVVTS YTLGQCRQSEKEKMEQKAISKRFKFEEPLLQEIPGEFIY

632/2825 FIGURE **569A**

CACGCCCCGCGCTGCTGGGTCCCGCCAGACACGCCGCCGCCGCAGGAAAGTCTACAGTTTGGTACCCCAGGACTC GCTGGTCAGGAAAGCCCTGCAGGACATGAGTGTTAGGCCCGACGCCTGGCCCTTGGCAGCTTGGGAGGTGGCTGG $\verb|CCTAGTGTCTGGGAAGACAGGCGCG| \textbf{ATG} | \texttt{ATGGACTCCCCGTTCCTGGAGCTGTGGCAGTCCAAGGCAGTGTCCAT|} \\$ CAGGGAGCAGCTGGGACTCGGGCCCAACGACTCCTATTGCTACAACTCGGCCAAAAACAGCACCGTGCT CCAGGGGGTCACCTTTGGTGGCATCCCCACTGTCCTGCTCATAGACGTCAGCTGCTTCCTGTTCTTAATCTTGGT GTTTTCTATTATAAGAAGAAGATTCTGGGACTATGGCCGCATTGCCCTGGTGTCAGAAGCAGACAGCGAGTCCAG ATTTCAGAGATTGTCATCGACTTCCTCCTCAGGTCAACAAGACTTTGAAAATGAGCTGGGATGCTGTCCCTGGCT GACTGCCATCTTCCGTCTGCATGATGACCAGATCCTGGAATGGTGTGGGGAGGACGCCATCCACTACCTGTCCTT AGGGGATTTGCTGGACAAAGACCCGTATAGTTTTGGGAGGACAACAATAGCAAACCTACAGACTGACAATGACCT CCTTTGGCTGCACCACCTTTTGCTGTCATTTACCTCTTCTTCACTGTGGGTTTCATGCGGCACCACACTCAGTC GACTGTGGAGAGCCACTTCCGGGACGCGTATCCCACGTGTGAGGTGGTTGATGTGCAGCTGTGCTACAACGTGGC CAAACTGATCTACCTGTGCAAGGAGAAAAAGAAGACTGAGAAGAGCCTGACCTATTACACAAACCTGCAGGTGAA GACAGGCCAGCGGACCCTCATCAACCCCAAGCCCTGTGGCCAGTTTTGCTGCTGTGAAGTGCTGGGCTGTGAGTG GGAAGACGCCATCTCTTACTACACACGGATGAAGGACAGGCTGCTGGAGAGGATCACAGAGGAAGAACGCCACGT ${\tt CCAGGACCAGCCCTGGGAATGGCCTTCGTCACCTTCCAGGAGAAGTCCATGGCCACCTACATCCTGAAAGATTT}$ CAATGCCTGCAAGTGTCAGAGCCTTCAGTGCAAAGGTGAGCCCCAGCCGTCCTCCCATAGCAGGGAGCTCTATAC $\tt CTCCAAGTGGACAGTCACCTTTGCTGCTGACCCTGAGGACATCTGCTGGAAGAACCTCTCTATCCAGGGCCTCCG$ $\tt CTGGTGGCTACAGTGGCTGGGCATCAACTTCACCCTCTTCCTGGGGGCTATTTTTCCTGACCACCCTCCATCAT$ $\tt CTGGACCAAGTCGGGGGAAAACCAGATCATGATGACCAAAGTCTACATATTCTTGATCTTCATGGTGCTGATCCT$ GCCCTCCCTGGGTCTCACCAGTCTAGATTTTTTCTTCCGGTGGCTCTTTGACAAAACTTCCTCGGAGGCCTCCAT ${\tt CAGGTTGGAGTGCGTCTTCCTGCCTGACCAGGGTGCCTTCTTTGTGAACTATGTCATCGCCTCGGCCTTCATCGG}$ CTTCACTGTCATCGTGGCCTACAGCATCACTTGTCCCATCATCGCGCCCATTTGGCCTCATCTACATCCTGCTCAA GCACATGGTGGACCGGCACAACCTCTACTTCGTCTACCTCCCAGCCAAGCTGGAGAAGGGGATCCACTTTGCCGC GAAGGCCCCCGCCACTCTGTTCACCTTCCTGGTGCTGCTCACCATCCTGGTCTGCCTGGCTCACACCTGCTT TGGATGCTTCAAGCACCTCAGCCCTCTGAACTACAAAACAGAAGAGCCTGCAAGTGACAAAGGAAGTGAGGCAGA GGCCCACATGCCCCCACCGTTCACACCCTACGTGCCTCGGATTCTGAACGGCTTGGCCTCGGAGAGGACAGCACT GTCTCCGCAGCAGCAGCAGCAGCCTATGGTGCCATCCACAACATCAGCGGGACTATCCCTGGACAGTGCTT CACAACCAGAATGGCCTGGGGCTCAGGCCCTTGGCTGAGTGGGAATGCGTTGGGACTGCCCAGCTGAGCTATCAG TCCCCTCCGGCACAAGCTTCCAGCTCTGCAGCTGGGGTGACATCCCCAGTGGTTTGTCGCCAAGACCATGTGGTG CCTTCTGAGCACACACACCGATAACCAAAGAGATGCTGCAGTCCAGGTCTGAGGTCCCGCTGGCATCCAGCT CCCTGCTCCATGGCCAGTCCCTCCAGCCAGCCTCCAGGCTACATCCAGGAGTAAGCTATGGGGAACA GGTTGGGAGGTGGCCAGTGCCCAGCTGTGCACACATCTCTGTATCCCGCTAGAGTTCTGTGTTTTTGTAT TCTGTGCAGTACTCACCCCCTCCGTCTGCTCCCTCCAAGGTGTGGGGGGTGGGCAGTGCTCAGGGCCTCCTCGGAG CCAAAGGACAGCATGGTCGGCACAGAGGAAGGGGTACCTGGGCTGGGTGCAGGGCCATCCCACTGCCCTTGAGCT GTGGCTCTGGCAGGAAGGAGGGCAGCCCATCCCTCTTCTCCCTCTGGGGATTCTGGGGAATGGGATGCAACTT

633/2825 FIGURE 569B

634/2825 FIGURE **570**

MMDSPFLELWQSKAVSIREQLGLGDRPNDSYCYNSAKNSTVLQGVTFGGIPTVLLIDVSCFLFLILVFSIIRRRF WDYGRIALVSEADSESRFQRLSSTSSSGQQDFENELGCCPWLTAIFRLHDDQILEWCGEDAIHYLSFQRHIIFLL VVVSFLSLCVILPVNLSGDLLDKDPYSFGRTTIANLQTDNDLLWLHTIFAVIYLFFTVGFMRHHTQSIKYKEENL VRRTLFITGLPRDARKETVESHFRDAYPTCEVVDVQLCYNVAKLIYLCKEKKKTEKSLTYYTNLQVKTGQRTLIN PKPCGQFCCCEVLGCEWEDAISYYTRMKDRLLERITEEERHVQDQPLGMAFVTFQEKSMATYILKDFNACKCQSL QCKGEPQPSSHSRELYTSKWTVTFAADPEDICWKNLSIQGLRWWLQWLGINFTLFLGLFFLTTPSIILSTMDKFN VTKPIHALNNPIISQFFPTLLLWSFSALLPSIVYYSTLLESHWTKSGENQIMMTKVYIFLIFMVLILPSLGLTSL DFFFRWLFDKTSSEASIRLECVFLPDQGAFFVNYVIASAFIGNGMELLRLPGLILYTFRMIMAKTAADRRNVKQN QAFQYEFGAMYAWMLCVFTVIVAYSITCPIIAPFGLIYILLKHMVDRHNLYFVYLPAKLEKGIHFAAVNQALAAP ILCLFWLYFFSFLRLGMKAPATLFTFLVLLLTILVCLAHTCFGCFKHLSPLNYKTEEPASDKGSEAEAHMPPPFT PYVPRILNGLASERTALSPQQQQQQTYGAIHNISGTIPGQCLAQSATGSVAAAPQEA

635/2825 FIGURE **571A**

TTGGGGCCGCGTGTCGACTGCCGGGGAAGTGGTGTTTCAAACCGGCATGGTCGGCTACCCCGAGGCCCTCACTG ATCCCTCCTACAAGGCACAGATCTTAGTGCTCACCTATCCTCTGATCGGCAACTATGGCATCCCCCCAGATGAAA TGGATGAGTTCGGTCTCTGCAAGTGGTTTGAATCCTCGGGCATCCACGTAGCAGCACTGGTAGTGGGAGAGTGCT GTCCTACTCCCAGCCACTGGAGTGCCACCCGCACCCTGCATGAGTGGCTGCAGCAGCATGGCATCCCTGGCTTGC AAGGAGTAGACACTCGGGAGCTGACCAAGAAGTTGCGGGAACAGGGGTCTCTGCTGGGGAAGCTGGTCCAGAATG CACGGGTATTCAATACAGGGGGTGCCCCTCGGATCCTTGCTTTGGACTGTGGCCTCAAGTATAATCAGATCCGAT GCCTCTGCCAGCGTGGGGCTGAGGTCACTGTGGTACCCTGGGACCATGCACTAGACAGCCAAGAGTATGAGGGTC TCTTCTTAAGTAATGGGCCTGGTGACCCTGCCTCCTATCCCAGTGTCGTATCCACACTGAGCCGTGTTTTATCTG AGCCTAATCCCCGACCTGTCTTTGGGATCTGCCTGGGACACCAGCTATTGGCCTTAGCCATTGGGGCCAAGACTT ACAAGATGAGATATGGGAACCGAGGCCATAACCAGCCCTGCTTGTTGGTGGGCTCTTGGGGCGCTGCTTTCTGACAT $\verb|CCCAGAACCATGGGTTTGCTGTGGAGACAGACTCACTGCCAGCAGGACTGGGCTCCTCTTCACCAACGCCAATG| \\$ ATGGTTCCAATGAAGGCATTGTGCACAACAGCTTGCCTTTCTTCAGTGTCCAGTTTCACCCAGAGCACCAAGCTG GCCCTTCAGATATGGAACTGCTTTTCGATATCTTTCTGGAAACTGTGAAAGAGGCCACAGCTGGGGAACCCTGGGG GCCAGACAGTTAGAGAGCGGCTGACTGAGCGCCTCTGTCCCCCTGGGATTCCCACTCCCGGCTCTGGACTTCCAC CACCACGAAAGGTTCTGATCCTGGGCTCAGGGGGCCTCTCCATTGGCCAAGCTGGAGAATTTGACTACTCGGGCT $\verb|CCTCCCAGGGGCCGACAAGGTCTATTTCTTCCCATAACACCTCATTATGTAACCCAGGTGATACGTAATG|\\$ AACGCCCCGATGGTGTTACTGACTTTTGGGGGCCAGACTGCTCTGAACTGTGGTGTGGAGCTGACCAAGGCCG TTGCCTCTAACAGGGAGGAGCTCTCTGCTCTCGTGGCCCCAGCTTTTGCCCATACCAGCCAAGTGCTAGTAGACA AGTCTCTGAAGGGATGGAAGGAGATTGAGTACGAGGTGGTGAGAGACCCCTATGGCAACTGTGTCACGGTGTGTA ACATGGAGAACTTGGACCCACTGGGCATCCACACTGGTGAGTCCATAGTGGTGGCCCCTAGCCAGACACTGAATG ACAGGGAGTATCAGCTCCTGAGGCAGACAGCTATCAAGGTGACCCAGCACCTGGGAATTGTTGGGGAGTGCAATG TGCAGTATGCCTTGAACCCTGAGTCTGAGCAGTATTACATCATTGAAGTGAATGCCAGGCTCTCTCGCAGCTCTG CCCTGGCCAGTAAGGCCACAGGTTATCCACTGGCTTATGTGGCAGCCAAGCTAGCATTGGGCATCCCTTTGCCTG GATGGGACCTTAGCAAGTTCCTGCGAGTCAGCACAAAGATTGGGAGCCTGCATGAAGAGCGTTGGTGAAGTCATGG GCATTGGGCGTTCATTTGAGGAGGCCTTCCAGAAGGCCCTGCGCATGGTGGATGAGAACTGTGTGGGCTTTGATC ACACAGTGAAACCAGTCAGCGATATGGAGTTGGAGACTCCAACAGATAAGCGGATTTTTGTGGTGGCAGCTGCTT TGTGGGCTGGTTATTCAGTGGACCGCCTGTATGAGCTCACACGCATCGACCGCTGGTTCCTGCACCGAATGAAGC GTATCATCGCACATGCCCAGCTGCTAGAACAACACCGTGGACAGCCTTTGCCGCCAGACCTGCTGCAACAGGCCA AGGAACTGGGGATCTGTCCAGCAGTGAAACAGATTGACACAGTTGCAGCTGAGTGGCCAGCCCAGACAAATTACC TATACCTAACGTATTGGGGCACCACCCATGACCTCACCTTTCGAACACCTCATGTCCTAGTCCTTGGCTCTGGCG TCTACCGTATTGGCTCTAGCGTTGAATTTGACTGGTGTGCTGTAGGCTGCATCCAGCAGCTCCGAAAGATGGGAT ATAAGACCATCATGGTGAACTATAACCCAGAGACAGTCAGCACCGACTATGACATGTGTGATCGACTCTACTTTG ATGAGATCTCTTTTGAGGTGGTGATGGACATCTATGAGCTCGAGAACCCTGAAGGTGTGATCCTATCCATGGGTG GACAGCTGCCCAACAACATGGCCATGGCGTTGCATCGGCAGCAGTGCCGGGTGCTGGGCACCTCCCCTGAAGCCA AGCTCAGTGACCTCGAGTCTGCCCAATTCTGCCAGACCGTGGGGTACCCCTGTGTGGTGCGCCCCTCCTATG TGCTGAGCGGTGCTGCTATGAATGTGGCCTACACGGATGGAGACCTGGAGCGCTTCCTGAGCAGCAGCAGCCG TCTCCAAAGAGCATCCCGTGGTCATCTCCAAGTTCATCCAGGAGGCTAAGGAGATTGACGTGGATGCCGTGGCCT CTGATGGTGGTGGCAGCCATCGCCATCTCTGAGCATGTGGAGAATGCAGGTGTGCATTCAGGTGATGCGACGC TGGTGACCCCCCACAAGATATCACTGCCAAAACCCTGGAGCGGATCAAAGCCATTGTGCATGCTGTGGGCCAGG

636/2825 FIGURE **571B**

AGCTACAGGTCACAGGACCCTTCAATCTGCAGCTCATTGCCAAGGATGACCAGCTGAAAGTTATTGAATGCAACG TACGTGTCTCCCCTTCCCCTTCGTTTCCAAGACACTGGGTGTGGACCTAGTAGCCTTGGCCACGCGGGTCA TCATGGGGGAAGAAGTGGAACCTGTGGGGCTAATGACTGGTTCTGGAGTCGTGGGAGTAAAGGTGCCTCAGTTCT CCTTCTCCCGCTTGGCGGGTGCTGACGTGTTGGGTGTGGAAATGACCAGTACTGGGGAGGTGGCCGGCTTTG GGGAGAGCCGCTGTGAGGCATACCTCAAGGCCATGCTAAGCACTGGCTTTAAGATCCCCCAAGAAGAATATCCTGC TGACCATTGGCAGCTATAAGAACAAAAGCGAGCTGCTCCCAACTGTGCGGCTACTGGAGAGCCTGGGCTACAGCC TCTATGCCAGTCTCGGCACAGCTGACTTCTACACTGAGCATGGCGTCAAGGTAACAGCTGTGGACTGGCACTTTG TGATTAACCTGTCAATGCGTGGAGCTGGGGGCCCGGCGTCTCTCTTTCCTTTGTCACCAAGGGCTACCGCACCCGAC GCTTGGCCGCTGACTTCTCCGTGCCCCTAATCATCGATATCAAGTGCACCAAACTCTTTGTGGAGGCCCTAGGCC AGATCGGGCCAGCCCTCCTTTGAAGGTGCATGTTGACTGTATGACCTCCCAAAAGCTTGTGCGACTGCCGGGAT TGATTGATGTCCATGTGCACCTGCGGGAACCAGGTGGGACACATAAGGAGGACTTTGCTTCAGGCACAGCCGCTG CCCTGGCTGGGGGTATCACCATGGTGTGTGCCATGCCTAATACCCGGCCCCCATCATTGACGCCCCTGCTCTGG CCCTGGCCCAGAAGCTGGCAGAGGCTGGCGCCCCGGTGCGACTTTGCGCTATTCCTTGGGGCCTCGTCTGAAAATG CAGGAACCTTGGGCACCGTGGCCGGGTCTGCAGCCGGGCTGAAGCTTTACCTCAATGAGACCTTCTCTGAGCTGC GGCTGGACAGCGTGGTCCAGTGGATGGAGCATTTCGAGACATGGCCCTCCCACCTCCCCATTGTGGCTCACGCAG GCCAGGATGTGGAAGCCCTGTGGGAGAACATGGCTGTCATCGACTGCTTTGCCTCAGACCATGCTCCCCATACCT $\verb|CTGTAAGCGAGGGCCGGCTCAGCCTGGACGACCTGCTGCAGCGATTGCACCACAATCCTCGGCGCATCTTTCACC| \\$ $\tt TGCCCCGCAGGAGGACACCTATGTGGAGGTGGATCTGGAGCATGAGTGGACAATTCCCAGCCACATGCCCTTCT$ TTGCCTATATCGATGGGCAGGTTCTGGTACCCCCGGGCTATGGACAGGATGTACGGAAGTGGCCACAGGGGGCTG TTCCTCAGCTCCCACCCTCAGCCCCTGCCACTAGTGAGATGACCACGACACCTGAAAGACCCCGCCGTGGCATCC CAGGGCTTCCTGATGGCCGCTTCCATCTGCCGCCCCGAATCCATCGAGCCTCCGACCCAGGTTTGCCAGCTGAGG AGCCAAAGGAGAAGTCCTCTCGGAAGGTAGCCGAGCCAGAGCTGATGGGAACCCCTGATGGCACCTGCTACCCTC CACCACCAGTACCGAGACAGGCATCTCCCCAGAACCTGGGGACCCCTGGCTTGCTGCACCCCCAGACCTCACCCC TGCTGCACTCATTAGTGGGCCAACATATCCTGTCCGTCCAGCAGTTCACCAAGGATCAGATGTCTCACCTGTTCA ATGTGGCACACACCTGCGTATGATGGTGCAGAAGGAGCCGGAGCCTCGACATCCTGAAGGGGAAGGTCATGGCCT CCATGTTCTATGAAGTGAGCACCACGGACCAGCAGCTCCTTTGCAGCAGCCATGGCCCGGCTGGGAGGTGCTGTGC TCAGCTTCTCGGAAGCCACATCGTCCGTCCAGAAGGGCGAATCCCTGGCTGACTCCGTGCAGACCATGAGCTGCT ATGCCGACGTCGTCGTCCCGGCACCCCCAGCCTGGAGCAGTGGAGCTGGCCGCAAGCACTGCCGGAGGCCAG $\tt TGGGAACTGTCAATGGCATGACGATCACGATGGTGGGTGACCTGAAGCACGGACGCACAGTACATTCCCTGGCCT$ GCCTGCTCACCCAGTATCGTGTCAGCCTGCGCTACGTGGCACCTCCCAGCCTGCGCATGCCACCACTGTGCGGG $\verb|CCTTCGTGGCCTCCCGCGGCACCAAGCAGGAGGAATTCGAGAGCATTGAGGAGGCGCTGCCTGACACTGATGTGC| \\$ TCACTCCCCACATCATGACCCGGGCCAAGAAGAAGATGGTGGTGATGCACCCGATGCCCCGTGTCAACGAGATAA GCGTGGAAGTGGACTCGGATCCCCGCGCAGCCTACTTCCGCCAGGCTGAGAACGGCATGTACATCCGCATGGCTC TGTTAGCCACCGTGCTGGGCCGTTTCTAGGGGCCTGGCTTCCTCAGCCTCTTCTCTTTAGGCCCAGCTGCTGGGC AAGGAATTCCAGTGCCTCCTACGGGGGCAGCACTTAGATATTCCTGGACATCCAGATTGCTCACATGTGCTGA CCACACTTCAGGCTCTGGACTGGAGCTCTCTGGCATGGGGGGCCCTCAGATGCTGGGGGCCCAGTCTGCCCCA TCTTCATTCCTGCACCTTAAACCTGTACAGTCATTTTTCTACTGACTTAATAAACAGCCGAGCTGTCCCTTG

637/2825 FIGURE **572**

MAALVLEDGSVLRGQPFGAAVSTAGEVVFQTGMVGYPEALTDPSYKAQILVLTYPLIGNYGIPPDEMDEFGLCKW FESSGIHVAALVVGECCPTPSHWSATRTLHEWLQQHGIPGLQGVDTRELTKKLREQGSLLGKLVQNGTEPSSLPF LDPNARPLVPEVSIKTPRVFNTGGAPRILALDCGLKYNQIRCLCQRGAEVTVVPWDHALDSQEYEGLFLSNGPGD PASYPSVVSTLSRVLSEPNPRPVFGICLGHQLLALAIGAKTYKMRYGNRGHNQPCLLVGSGRCFLTSQNHGFAVE TDSLPADWAPLFTNANDGSNEGIVHNSLPFFSVQFHPEHQAGPSDMELLFDIFLETVKEATAGNPGGOTVRERLT ERLCPPGIPTPGSGLPPPRKVLILGSGGLSIGQAGEFDYSGSQAIKALKEENIQTLLINPNIATVQTSQGLADKV YFLPITPHYVTQVIRNERPDGVLLTFGGQTALNCGVELTKAGVLARYGVRVLGTPVETIELTEDRRAFAARMAEI GEHVAPSEAANSLEQAQAAAERLGYPVLVRAAFALGGLGSGFASNREELSALVAPAFAHTSQVLVDKSLKGWKEI EYEVVRDAYGNCVTVCNMENLDPLGIHTGESIVVAPSQTLNDREYQLLRQTAIKVTQHLGIVGECNVQYALNPES EQYY11EVNARLSRSSALASKATGYPLAYVAAKLALG1PLPELRNSVTGGTAAFEPSVDYCVVK1PRWDLSKFLR VSTKIGSCMKSVGEVMGIGRSFEEAFQKALRMVDENCVGFDHTVKPVSDMELETPTDKRIFVVAAALWAGYSVDR LYELTRIDRWFLHRMKRIIAHAQLLEQHRGQPLPPDLLQQAKCLGFSDKQIALAVLSTELAVRKLRQELGICPAV KQIDTVAAEWPAQTNYLYLTYWGTTHDLTFRTPHVLVLGSGVYRIGSSVEFDWCAVGCIQQLRKMGYKTIMVNYN PETVSTDYDMCDRLYFDEISFEVVMDIYELENPEGVILSMGGQLPNNMAMALHROOCRVLGTSPEAIDSAENRFK FSRLLDTIGISQPQWRELSDLESARQFCQTVGYPCVVRPSYVLSGAAMNVAYTDGDLERFLSSAAAVSKEHPVVI SKFIQEAKEIDVDAVASDGVVAAIAISEHVENAGVHSGDATLVTPPQDITAKTLERIKAIVHAVGOELOVTGPFN LQLIAKDDQLKVIECNVRVSRSFPFVSKTLGVDLVALATRVIMGEEVEPVGLMTGSGVVGVKVPQFSFSRLAGAD VVLGVEMTSTGEVAGFGESRCEAYLKAMLSTGFKIPKKNILLTIGSYKNKSELLPTVRLLESLGYSLYASLGTAD FYTEHGVKVTAVDWHFEEAVDGECPPQRSILEQLAEKNFELVINLSMRGAGGRRLSSFVTKGYRTRRLAADFSVP LIIDIKCTKLFVEALGQIGPAPPLKVHVDCMTSQKLVRLPGLIDVHVHLREPGGTHKEDFASGTAAALAGGITMV ${\tt CAMPNTRPPIIDAPALALAQKLAEAGARCDFALFLGASSENAGTLGTVAGSAAGLKLYLNETFSELRLDSVVQWM}$ EHFETWPSHLPIVAHAEQQTVAAVLMVAQLTQRSVHICHVARKEEILLIKAAKARGLPVTCEVAPHHLFLSHDDL ERLGPGKGEVRPELGSRQDVEALWENMAVIDCFASDHAPHTLEEKCGSRPPPGFPGLETMLPLLLTAVSEGRLSL DDLLQRLHHNPRRIFHLPPQEDTYVEVDLEHEWTIPSHMPFSKAHWTPFEGQKVKGTVRRVVLRGEVAYIDGQVL VPPGYGQDVRKWPQGAVPQLPPSAPATSEMTTTPERPRRGIPGLPDGRFHLPPRIHRASDPGLPAEEPKEKSSRK VAEPELMGTPDGTCYPPPPVPRQASPQNLGTPGLLHPQTSPLLHSLVGQHILSVQQFTKDQMSHLFNVAHTLRMM VQKERSLDILKGKVMASMFYEVSTRTSSSFAAAMARLGGAVLSFSEATSS

638/2825 FIGURE 573

AGGGAGTCGTGTCGGCCCCCGGCCCCCGAGCCCGCAGATTGCCCCACCGAAGCTCGTGTGTGCACCCCCGAT $\texttt{CCCGCCAGCCACTCGCCCTGGCCTCGCGGGCCGTGTCTCCGGCATC} \textbf{AT} \underline{\textbf{c}} \textbf{TGTGGTATATTTGCTTACTTAAACT}$ ACCATGTTCCTCGAACGAGACGAGAAATCCTGGAGACCCTAATCAAAGGCCTTCAGAGACTGGAGTACAGAGGAT ATGATTCTGCTGGTGTGGGATTTGATGGAGGCAATGATAAAGATTGGGAAGCCAATGCCTGCAAAACCCAGCTTA TTAAGAAGAAAGGTTAAGGCACTGGATGAAGAAGTTCACAAGCAACAAGATATGGATTTGGATATAGAAT TTGATGTACACCTTGGAATAGCTCATACCCGTTGGGCAACACATGGAGAACCCAGTCCTGTCAATAGCCACCCCC AGCGCTCTGATAAAAATTGAATTTATCGTTATTCACAATGGAATCATCACCAACTACAAAGACTTGAAAAAGT TTTTGGAAAGCAAAGGCTATGACTTCGAATCTGAAACAGACACAGAGACAATTGCCAAGCTCGTTAAGTATATGT ATGACAATCGGGAAAGTCAAGATACCAGCTTTACTACCTTGGTGGAGAGAGTTATCCAACAATTGGAAGGTGCTT TIGCACTIGIGTTTAAAAGTGTTCATTTTCCCGGGCAAGCAGTTGGCACAAGGCGAGGTAGCCCTCTGTTGATTG GTGTACGGAGTGAACATAAACTTTCTACTGATCACATTCCTATACTCTACAGAACAGGCAAAGACAAGAAAGGAA GCTGCAATCTCTCGTGTGGACAGCACAACCTGCCTTTTCCCGGTGGAAGAAAAAGCAGTGGAGTATTACTTTG CTTCTGATGCAAGTGCTGTCATAGAACACCAATCGCGTCATCTTTCTGGAAGATGATGATGTTGCAGCAGTAG TGGATGGACGTCTTTCTATCCATCGAATTAAACGAACTGCAGGAGATCACCCCGGACGAGCTGTGCAAACACTCC AGATGGAACTCCAGCAGATCATGAAGGGCAACTTCAGTTCATTTATGCAGAAGGAAATATTTGAGCAGCCAGAGT CTGTCGTGAACACAATGAGAGGAAGAGTCAACTTTGATGACTATACTGTGAATTTGGGTGGTTTGAAGGATCACA TAAAGGAGATCCAGAGATGCCGGCGTTTGATTCTTATTGCTTGTGGAACAAGTTACCATGCTGGTGTAGCAACAC GTCAAGTTCTTGAGGAGCTGACTGAGTTGCCTGTGATGGTGGAACTAGCAAGTGACTTCCTGGACAGAAACACAC CAGTCTTTCGAGATGATGTTTGCTTTTTCCTTAGTCAATCAGGTGAGACAGCAGATACTTTGATGGGTCTTCGTT ACTGTAAGGAGAGAGGCTTTAACTGTGGGGATCACAAACACAGTTGGCAGTTCCATATCACGGGAGACAGATT TGAAACGGCTGCCTGATTTGATTAAGGAAGTACTGAGCATGGATGACGAAATTCAGAAACTAGCAACAGAACTTT ATCATCAGAAGTCAGTTCTGATAATGGGACGAGGCTATCATTATGCTACTTGTCTTGAAGGGGCACTGAAAATCA AAGAAATTACTTATATGCACTCTGAAGGCATCCTTGCTGGTGAATTGAAACATGGCCCTCTGGCTTTGGTGGATA AATTGATGCCTGTGATCATGATCATGAGAGATCACACTTATGCCAAGTGTCAGAATGCTCTTCAGCAAGTGG TTGCTCGGCAGGGCCGCCTGTGGTAATTTGTGATAAGGAGGATACTGAGACCATTAAGAACACAAAAAGAACGA TCAAGGTGCCCCACTCAGTGGACTGCTTGCAGGGCATTCTCAGCGTGATCCCTTTACAGTTGCTGGCTTTCCACC $\tt TTGCTGTGCTGAGAGGCTATGATGTTGATTTCCCACGGAATCTTGCCAAATCTGTGACTGTAGAG{\color{red} \bf TGA}{\color{blue} \bf GGAATAT}$ CTATACAAAATGTACGAAACTGTATGATTAAGCAACACAGACACCTTTTGTATTTAAAACCTTGATTTAAAATA TCACCCCTTGAAGCCTTTTTTTAGTAAATCCTTATTTATATATCAGTTATAATTATTCCACTCAATATGTGATTT ${\tt TTGTGAAGTTACCTCTTACATTTTCCCAGTAATTTGTGGAGGACTTTGAATAATGGAATCTATATTGGAATCTGT}$ ATCAGAAAGATTCTAGCTATTATTTTCTTTAAAGAATGCTGGGTGTTGCATTTCTGGACCCTCCACTTCAATCTG TAATTGGAGTATCTAAAGCCAGTGGCAGTGTATGCTCATACTTGGACAGTTAGGGAAGGGTTTGCCAAGTTTTAA GAGAAGATGTGATTTATTTTGAAATTTGTTTCTGTTTTGTTTTTAAATCAAACTGTAAAACTTAAAACTGAAAAA TTTTATTGGTAGGATTTATATCTAAGTTTGGTTAGCCTTAGTTTCTCAGACTTGTTGTCTATTATCTGTAGGTGG AAGAAATTTAGGAAGCGAAATATTACAGTAGTGCATTGGTGGGTCTCAATCCTTAACATATTTGCACAATTTTAT AGCACAAACTTTAAATTCAAGCTGCTTTGGACAACTGACAATATGATTTTAAATTTGAAGATGGGATGTGTACAT GTTGGGTATCCTACTACTTTGTGTTTTCATCTCCTAAAAGTGTTTTTTATTTCCTTGTATCTGTAGTCTTTTATT TTTTAAATGACTGCTGAATGACATATTTTATCTTGTTCTTTAAAATCACAACACAGAGCTGCTATTAAATTAATA TTGATAT

639/2825 FIGURE **574**

MCGIFAYLNYHVPRTRREILETLIKGLQRLEYRGYDSAGVGFDGGNDKDWEANACKTQLIKKKGKVKALDEEVHK
QQDMDLDIEFDVHLGIAHTRWATHGEPSPVNSHPQRSDKNNEFIVIHNGIITNYKDLKKFLESKGYDFESETDTE
TIAKLVKYMYDNRESQDTSFTTLVERVIQQLEGAFALVFKSVHFPGQAVGTRRGSPLLIGVRSEHKLSTDHIPIL
YRTGKDKKGSCNLSRVDSTTCLFPVEEKAVEYYFASDASAVIEHTNRVIFLEDDDVAAVVDGRLSIHRIKRTAGD
HPGRAVQTLQMELQQIMKGNFSSFMQKEIFEQPESVVNTMRGRVNFDDYTVNLGGLKDHIKEIQRCRRLILIACG
TSYHAGVATRQVLEELTELPVMVELASDFLDRNTPVFRDDVCFFLSQSGETADTLMGLRYCKERGALTVGITNTV
GSSISRETDCGVHINAGPEIGVASTKAYTSQFVSLVMFALMMCDDRISMQERRKEIMLGLKRLPDLIKEVLSMDD
EIQKLATELYHQKSVLIMGRGYHYATCLEGALKIKEITYMHSEGILAGELKHGPLALVDKLMPVIMIIMRDHTYA
KCQNALQQVVARQGRPVVICDKEDTETIKNTKRTIKVPHSVDCLQGILSVIPLQLLAFHLAVLRGYDVDFPRNLA

640/2825 FIGURE 575

GGGGAAGGAACACTGTAGGGGATAGCTGTCCACGGACGCTGTCTACAAGACCCTGGAGTGAGATAACGTGCCTGG TACTGTGCCCTGCATGTGTAAGATGCCCAGTTGACCTTCGCAGCAGGAGCCTGGATCAGGCACTTCCTGCCTCAG ${\tt GTATTGCTGGACAGCCCAGACACTTCCCTCTGTGACC} {\tt ATG} {\tt AAACTCTGGGTGTCTGCATTGCTGATGGCCTGGTT}$ AGAGCTGGTGCAGTCTCTGAAAGAGTACATCCTTGTGGAGGAAGCCAAGCTTTCCAAGATTAAGAGCTGGGCCAA ${\tt CAAAATGGAAGCCTTGACTAGCAAGTCAGCTGCTGATGCTGAGGGCTACCTGGCTCACCCTGTGAATGCCTACAA}$ ACTGGTGAAGCGGCTAAACACAGACTGGCCTGCGCGGAGGACCTTGTCCTGCAGGACTCAGCTGCAGGTTTTAT CGCCAACCTCTGTGCAGCGGCAGTTCTTCCCCACTGATGAGGACGAGATAGGAGCTGCCAAAGCCCTGATGAG ACTTCAGGACACATACAGGCTGGACCCAGGCACAATTTCCAGAGGGGAACCTTCCAGGAACCAAGTACCAGGCAAT GCTGAGTGTGGATGACTGCTTTGGGATGGGCCGCTCGGCCTACAATGAAGGGGACTATTATCATACGGTGTTGTG GATGGAGCAGGTGCTAAAGCAGCTTGATGCCGGGGAGGAGGCCACCACAACCAAGTCACAGGTGCTGGACTACCT TGTTTACGAGAGCCTCTGTCGTGGGGAGGGTGTCAAACTGACACCCCGTAGACAGAAGAGGCTTTTCTGTAGGTA CGTCAGGTACTACGATGTCATGTCTGATGAGGAAATCGAGAGGATCAAGGAGATCGCAAAACCTAAACTTGCACG AGCCACCGTTCGTGATCCCAAGACAGGAGTCCTCACTGTCGCCAGCTACCGGGTTTCCAAAAGCTCCTGGCTAGA GGAAGATGATGACCCTGTTGTGGCCCGAGTAAATCGTCGGATGCAGCATATCACAGGGTTAACAGTAAAGACTGC AGAATTGTTACAGGTTGCAAATTATGGAGTGGGAGGACAGTATGAACCGCACTTCGACTTCTCTAGGAATGATGA GCGAGATACTTTCAAGCATTTAGGGACGGGGAATCGTGTGGCTACTTTCTTAAACTACATGAGTGATGTAGAAGC TGGTGGTGCCACCGTCTTCCCTGATCTGGGGGCTGCAATTTGGCCTAAGAAGGGTACAGCTGTGTTCTGGTACAA $\tt CTCCAATAAGTGGTTCCATGAACGAGGACAGGAGTTCTTGAGACCTTGTGGATCAACAGAAGTTGAC{\color{red}{TGA}}CATCC$ CCTATCAGGCTGATTTTTGGAGAAATGAATGTTTGTCTGGAGCAGAGGGAGACCATACTAGGGCGACTCCTGTGT GACTGAAGTCCCAGCCCTTCCATTCAGCCTGTGCCATCCCTGGCCCCAAGGCTAGGATCAAAGTGGCTGCAGCAG AGTTAGCTGTCTAGCGCCTAGCAAGGTGCCTTTGTACCTCAGGTGTTTTAGGTGTGAGATGTTTCAGTGAACCAA CCCTACCAGAAGCCTTAAA

641/2825 FIGURE **576**

MKLWVSALLMAWFGVLSCVQAEFFTSIGHMTDLIYAEKELVQSLKEYILVEEAKLSKIKSWANKMEALTSKSAAD AEGYLAHPVNAYKLVKRLNTDWPALEDLVLQDSAAGFIANLSVQRQFFPTDEDEIGAAKALMRLQDTYRLDPGTI SRGELPGTKYQAMLSVDDCFGMGRSAYNEGDYYHTVLWMEQVLKQLDAGEEATTTKSQVLDYLSYAVFQLGDLHR ALELTRRLLSLDPSHERAGGNLRYFEQLLEEEREKTLTNQTEAELATPEGIYERPVDYLPERDVYESLCRGEGVK LTPRRQKRLFCRYHHGNRAPQLLIAPFKEEDEWDSPHIVRYYDVMSDEEIERIKEIAKPKLARATVRDPKTGVLT VASYRVSKSSWLEEDDDPVVARVNRRMQHITGLTVKTAELLQVANYGVGGQYEPHFDFSRNDERDTFKHLGTGNR VATFLNYMSDVEAGGATVFPDLGAAIWPKKGTAVFWYNLLRSGEGDYRTRHAACPVLVGCKWVSNKWFHERGQEF LRPCGSTEVD

642/2825 FIGURE **577**

643/2825 FIGURE 578

MTTNAGPLHPYWPQHLRLDNFVPNDRPTWHILAGLFSVTGVLVVTTWLLSGRAAVVPLGTWRRLSLCWFAVCGFIHLVIEGWFVLYYEDLLGDQAFLSQLWKEYAKGDSRYILGDNFTVCMETITACLWGPLSLWVVIAFLRQHPLRFILQLVVSVGQIYGDVLYFLTEHRDGFQHGELGHPLYFWFYFVFMNALWLVLPGVLVLDAVKHLTHAQSTLDAKATKAKSKKN

644/2825 FIGURE **579A**

GCACTGCTGCCACCGCCGTCGCCGCCGCCGCCGCCGCCGCTGCTGCTGCCGGTGCTAAGGAGTTCGCTGGA GCCCTTTCCTCAGACCCGGCCCGGTCTTCGCGCCCGGACTCCTGGCGCCAGCGCTAGGCGCACTCACCGCTCTGA CCTTCTTGCCATCGCCCCAGACATGGGGAACGCGGCGACCGCCAAGAAAGGCAGCGAGGTGGAGAGCGTGAAAGA GTTTCTAGCCAAAGCCAAAGAAGACTTTTTGAAAAAATGGGAGAATCCAACTCAGAATAATGCCGGACTTGAAGA TTTTGAAAGGAAAAAACCCTTGGAACAGGTTCATTTGGAAGAGTCATGTTGGTAAAACACAAAGCCACTGAACA GTATTATGCCATGAAGATCTTAGATAAGCAGAAGGTTGTTAAACTGAAGCAAATAGAGCATACTTTGAATGAGAA AAGAATATTACAGGCAGTGAATTTTCCTTTCCTTGTTCGACTGGAGTATGCTTTTAAGGATAATTCTAATTTATA CATGGTTATGGAATATGTCCCTGGGGGTGAAATGTTTTCACATCTAAGAAGAATTGGAAGGTTCAGTGAGCCCCA TGCACGGTTCTATGCAGCTCAGATAGTGCTAACATTCGAGTACCTCCATTCACTAGACCTCATCTACAGAGATCT AAAACCTGAAAATCTCTTAATTGACCATCAAGGCTATATCCAGGTCACAGACTTTGGGTTTGCCAAAAGAGTTAA AGGCAGAACTTGGGACATTATGTGGAACTCCAGAGTATTTGGCTCCAGAAATAATTCTCAGCAAGGGCTACAATAA GGCAGTGGATTGGTGGGCATTAGGAGTGCTAATCTATGAAATGGCAGCTGGCTATCCCCCATTCTTTGCAGACCA ACCAATTCAGATTTATGAAAAGATTGTTTCTGGAAAGGTCCGATTCCCATCCCACTTCAGTTCAGATCTCAAGGA $\verb|CCTTCTACGGAACCTGCTGCAGGTGGATTTGACCAAGAGATTTGGAAATCTAAAGAATGGTGTCAGTGATATAAA| \\$ AACTCACAAGTGGTTTGCCACGACAGATTGGATTGCTATTTACCAGAGGAAGGTTGAAGCTCCATTCATACCAAA GTTTAGAGGCTCTGGAGATACCAGCAACTTTGATGACTATGAAGAAGAAGATATCCGTGTCTCTATAACAGAAAA ${\tt ATGTGCAAAAGAATTTGGTGAATTT} \underline{{\tt TAA}} {\tt AGAGGAACAAGATGACATCTGAGCTCACACTCAGTGTTTGCACTCTG}$ TTGAGAGATAAGGTAGAGCTGAGACCGTCCTTGTTGAAGCAGTTACCTAGTTCCTTCATTCCAACGACTGAGTGA CTGTGCCATAACACAGTACTAGACCACTTTCTTACTTCTCTTTGGGTTGTCTTTCTCCTCCTACATCCATTTC TTCCTTTTCCAATTTCATTGGTTTTCTCTAAACAGTGCTCCATTTTATTTTGTTGGTGTTTCAGATGGGCAGTGT TATGGCTACGTGATATTTGAAGGGAAGGATAAGTGTTGCTTTCAGTAGTTATTGCCAATATTGTTGTTGGTCAAT GGCTTGAAGATAAACTTTCTAATAATTATTTCTTTGAGTAGCTCAGACTTGGTTTTGCCAAAACTCTTGGTA ATTTTTGAAGATAGACTGTCTTATCACCAAGGAAATTTATACAAATTAAGACTAACTTTCTTGGAATTCACTATT CTGGCAATAAATTTTGGTAGACTAATACAGTACAGCTAGACCCAGAAATTTGGAAGGCTGTAGATCAGAGGTTCT AGTTCCCTTTCCCTCTTTTATATCCTCCTCTCCTTGAGTAATGAAGTGACCAGCCTGTGTAGTGTGACAAACGT GTCTCATTCAGCAGGAAAAACTAATGATATGGATCATCACCCAGATTCTCTCACTTGGTACCAGCATTTCTGTAG GTATTAGAGAAGAGTTCTAAGTTTTCTAAACCTTAACTGTTCCTTAAGGATTTTAGCCAGTATTTTAATAGAACA TGATTAATGAAAGTGACAAATTTTAAATTTTCTCTAATAGTCCTCATCATAAACTTTTTAAAGGAAAATAAGCAA ACTAAAAAGAACATTGGTTTAGATAAATACTTATACTTTGCAAAGTCAAAAATGGCTTGATTTTTGGAAACAATA TAGAGGTATTCATATTTAAATGAGGGTTTACATTTGTTTTGTTTTGTAACCGTTAAAAAGAAGTTGTTTCCAGCT AATTATTGTGGTGTACTATATTTGTGAGCCTAGGGTAGGGGCACTGCTGCAACTTCTGCTTTCATCCCATGCCTC ATCAATGAGGAAAGGGAACAAAGTGTATAAAACTGCCACAATTGTATTTTAATTTTGAGGTATGATATTTTCAGA TTGAGAGGTTAGTTTTTTTCCTACACTTTTTTTTGCCAACTGACTTAACAACATTGCTGTCAGGTGGAAATTTCA AGCACTTTTGCACATTTAGTTCAGTGTTTGTTGAGAATCCATGGCTTAACCCACTTGTTTTGCTATTTTTTCTT AATCATTCTATTTGCTTTATTATCGGTGCAGGTAGGTCATTAACACCACTTCTTTTCATCTGTACCACACCCTGG GTGTTTCTGCATGGTAATGTCATGTAAATGCTGATATTGATTTCACTGGTCCATCTATATTTAAAACGTGCAAGA AAAAAATAAAATACTCTGCTCTAGCAAGTTTTGTGTAACAAAGGCATATCGTCATGTTAATAAATTTAAAACATC ATTCGTATAAAATATTTTAATTTTCTTGTATTTCATTTAGACCCAAGAACATGCTGACCAATGTGTTCTATATGT AAACTACAAATTCTATGGTAGCTTTGTTGTATATTATTGTAAAATTATTTTAATAAGTCATGGGGATGACAATTT $\verb|CTAGTGCCCAGCTGTAGAATCTACCTTAGGTAGATCATCCTAGACATACGTTGGTTTTGAGGGCTATTCAGCCA| \\$ $\verb|TTCCATTTTACTCTCTATTTAAAGGCCGTGAGCAAGCTTGTCATGAGCAAATATGTCAAGGGAGTCAATTTCTGA|$

645/2825 FIGURE **579B**

646/2825 FIGURE 580

HCCCHRRRRAAAPLLLPVLRSSLEPFPQTRPGLRARTPGASARRTHRSDGCRRGSCPRLWSGGHGPSPPSLPXPLAIAPDMGNAATAKKGSEVESVKEFLAKAKEDFLKKWENPTQNNAGLEDFERKKTLGTGSFGRVMLVKHKATEQYAMKILDKQKVVKLKQIEHTLNEKRILQAVNFPFLVRLEYAFKDNSNLYMVMEYVPGGEMFSHLRRIGRFSEPHARFYAAQIVLTFEYLHSLDLIYRDLKPENLLIDHQGYIQVTDFGFAKRVKGRTWTLCGTPEYLAPEIILSKGYNKAVDWWALGVLIYEMAAGYPPFFADQPIQIYEKIVSGKVRFPSHFSSDLKDLLRNLLQVDLTKRFGNLKNGVSDIKTHKWFATTDWIAIYQRKVEAPFIPKFRGSGDTSNFDDYEEEDIRVSITEKCAKEFGEF

647/2825 FIGURE 581

 $\tt CCAGCCCCCTTCCCTGACCCCTTCTTGCCATCGCCCCAGAC \underline{ATG} \\ \tt GGGAACGCGGCGACCGCCAAGAAG \\ \tt AGGAAG \\ \tt GGCCCCCTTCCTGACCCCTTCTTGCCATCGCCCCAGAC \\ \underline{ATG} \\ \tt GGGAACGCGGCGACCGCCAAGAAAG \\ \tt GGCCCCCTTCTTGCCATCGCCCCAGAC \\ \underline{ATG} \\ \tt GGGAACGCGGCGACCGCCAAGAAAG \\ \tt GGCCCCTTCTTGCCATCGCCCCAGAC \\ \underline{ATG} \\ \tt GGGAACGCGGCGACCGCCAAGAAAG \\ \underline{ATG} \\ \tt GGGAACGCGGCGACCGCCAAGAAAG \\ \underline{ATG} \\ \tt GGCCCCCTTCTTGCCATCGCCCCAGACAG \\ \underline{ATG} \\ \tt GGCCCCCAGACAG \\ \underline{ATG} \\ \underline{ATG} \\ \tt GGCCCCCAGACAG \\ \underline{ATG} \\$ GCAGCGAGGTGGAGAGCGTGAAAGAGTTTCTAGCCAAAGCCAAAGAAGACTTTTTGAAAAAAATGGGAGAATCCAA CTCAGAATAATGCCGGACTTGAAGATTTTGAAAGGAAAAAAACCCTTGGAACAGGTTCATTTGGAAGAGTCATGT TGGTAAAACACAAAGCCACTGAACAGTATTATGCCATGAAGATCTTAGATAAGCAGAAGGTTGTTAAACTGAAGC AAATAGAGCATACTTTGAATGAGAAAAGAATATTACAGGCAGTGAATTTTCCTTTCCTTGTTCGACTGGAGTATG CTTTTAAGGATAATTCTAATTTATACATGGTTATGGAATATGTCCCTGGGGGTGAAATGTTTTCACATCTAAGAA GAATTGGAAGGTTCAGTGAGCCCCATGCACGGTTCTATGCAGCTCAGATAGTGCTAACATTCGAGTACCTCCATT CACTAGACCTCATCTACAGAGATCTAAAACCTGAAAATCTCTTAATTGACCATCAAGGCTATATCCAGGTCACAG ACTTTGGGTTTGCCAAAAGAGTTAAAGGCAGAACTTGGACATTATGTGGAACTCCAGAGTATTTGGCTCCAGAAA TAATTCTCAGCAAGGGCTACAATAAGGCAGTGGATTGGTGGGCATTAGGAGTGCTAATCTATGAAATGGCAGCTG GCTATCCCCCATTCTTTGCAGACCAACCAATTCAGATTTATGAAAAGATTGTTTCTGGAAAGGTCCGATTCCCAT $\verb|CCCACTTCAGTTCAGATCTCAAGGACCTTCTACGGAACCTGCTGCAGGTGGATTTGACCAAGAGATTTGGAAATC| \\$ TAAAGAATGGTGTCAGTGATATAAAAACTCACAAGTGGTTTGCCACGACAGATTGGATTGCTATTTACCAGAGGA AGGTTGAAGCTCCATTCATACCAAAGTTTAGAGGGCTCTGGAGATACCAGCAACTTTGATGACTATGAAGAAGAAG $\tt ATATCCGTGTCTCTATAACAGAAAATGTGCAAAAGAATTTGGTGAATTT{\color{red}{\textbf{TAA}}} AGAGGAACAAGATGACATCTGA$ GCTCACACTCAGTGTTTGCACTCTGTTGAGAGATAAGGTAGAGCTGAGACCGTCCTTGTTGAAGCAGTTACCTAG TTCCTTCATTCCAACGACTGAGTGAGGTCTTTATTGCCATCATCCGTGTGCGCACTCTGCATCCACCTATGTAAC AAGGCACCGCTAAGCAAGCATTGTCTGTGCCATAACACAGTACTAGACCACTTTCTTACTTCTCTTTTGGGTTGTC TTTCTCCTCTCCTACATCCATTTCTTCCTTTTCAATTTCATTGGTTTTCTCTAAACAGTGCTCCATTTTATTTTG TTGGTGTTTCAGATGGCCAGTGTTATGGCTACGTGATATTTGAAGGGAAGGATAAGTGTTGCTTTCAGTAGTTAT TGCCAATATTGTTGTTGGTCAATGGCTTGAAGATAAÁCTTTCTAATAATTATTATTTCTTTGAGTAGCTCAGACT TGGTTTTGCCAAAACTCTTGGTAATTTTTGAAGATAGACTGTCTTATCACCAAGGAAATTTATACAAATTAAGAC TAACTTTCTTGGAATTCACTATTCTGGCAATAAATTTTGGTAGACTAATACAGTACAGCTAGACCCAGAAATTTG GAAGGCTGTAGATCAGAGGTTCTAGTTCCCTTTCCCTCCTTTATATCCTCCTCTCTTGAGTAATGAAGTGACC AGCCTGTGTAGTGTGACAAACGTGTCTCATTCAGCAGGAAAAACTAATGATATGGATCATCACCCAGATTCTCTC ACTTGGTACCAGCATTTCTGTAGGTATTAGAGAAGAGTTCTAAGTTTTCTAAACCTTAACTGTTCCTTAAGGATT TTAGCCAGTATTTTAATAGAACATGATTAATGAAAGTGACAAATTTTAAATTTTCTCTAATAGTCCTCATCATAA ACTTTTTAAAGGAAATAAGCAAACTAAAAAGAACATTGGTTTAGATAAATACTTATACTTTGCAAAGTCAAAAA TGGCTTGATTTTTGGAAACAATATAGAGGTATTCATATTTAAATGAGGGTTTACATTTGTTTTGTTATGTAACCG TTAAAAAGAAGTTGTTTCCAGCTAATTATTGTGGTGTACTATATTTGTGAGCCTAGGGTAGGGGCACTGCTGCAA CTTCTGCTTTCATCCCATGCCTCATCAATGAGGAAAGGGAACAAAGTGTATAAAACCTGCCACAATTGTATTTTA ATTTTGAGGTATGATATTTCAGATATTTCATAATTTCTAACCTCTGTTCTCTCAGTAAACAGAATGTCTGATCG CACTTGTTTTGCTATTTTTTTTTTTTTTAATTTTCCCCATCTGATTTTATCTCTGCGTTTCAGTGACCTACC ATCTATATGTCTTTCGGTTATCAAGTGTTTCTGCATGGTAATGTCATGTAAATGCTGATATTGATTTCACTGGTC CATCTATATTTAAAACGTGC

648/2825 FIGURE 582

MGNAATAKKGSEVESVKEFLAKAKEDFLKKWENPTQNNAGLEDFERKKTLGTGSFGRVMLVKHKATEQYYAMKIL DKQKVVKLKQIEHTLNEKRILQAVNFPFLVRLEYAFKDNSNLYMVMEYVPGGEMFSHLRRIGRFSEPHARFYAAQ IVLTFEYLHSLDLIYRDLKPENLLIDHQGYIQVTDFGFAKRVKGRTWTLCGTPEYLAPEIILSKGYNKAVDWWAL GVLIYEMAAGYPPFFADQPIQIYEKIVSGKVRFPSHFSSDLKDLLRNLLQVDLTKRFGNLKNGVSDIKTHKWFAT TDWIAIYQRKVEAPFIPKFRGSGDTSNFDDYEEEDIRVSITEKCAKEFGEF

649/2825 FIGURE 583A

TCCCGAAACCAGAGGGATGGGGCCGGCTGTGCAGTAGAACGGGGATCGAAAAGAGGGAAAACAAGGGCACGAAGAC CAGCGAGAAAGAAGAGACACCTGGGAAAGGCGGAAGCAGAAGACGGGAAAAGAAACCCATAGCAGGTG TCTTTTTCCTACCGTTAATGAAAACTACTTTTGTCTTCATCATAAAAGAAAAAACTAAGGGGAGGTAAAGGCAG TCTCCTGTTTTATTAGGGGGAGAGGTGAAGGGAAATCCAGGCTCACTTTCTGAATAAGCCACTGCCTGGTGCACA GAGCAGAACCATCCTGGTTTCTGAAGACACATCCCTTTCAGCAGAATTCCAGCCGGAGTCGCTGGCACAGTTCTA TGTAAACGCGAGTGACCAGAAAGTGTGAATGCGGAGTAGGAATATTTTTCGTGTTCTCTTTTATCTGCTTGCCTT TTTTAGAGAGTAGCAGTGGTTCCTATTTCGGAAAAGGACGTTCTAATTCAAAGCTCTCTCCCAATATATTTACAC GAATACGCATTTAGAAAGGGAGGCAGCTTTTGAGGTTGCAATCCTACTGAGAAGG**ATG**GAAGAAGGAGCCAGGCA CCGAAACACCCGAAAAGAAACACCCAGGTGGGGGCGAGTCGGACGCCAGCCCCGAGGCTGGTTCCGGAGGGGG CGGAGTAGCCCTGAAGAAAGAGATCGGATTGGTCAGTGCCTGTGGTATCATCGTAGGGAACATCATCGGCTCTGG AATCTTTGTCTCGCCAAAGGGAGTGCTGGAGAATGCTGGTTCTGTGGGCCTTGCTCTCATCGTCTGGATTGTGAC GGGCTTCATCACAGTTGTGGGAGCCCTCTGCTATGCTGAACTCGGGGGTCACCATCCCCAAATCTGGAGGTGACTA $\tt CTCCTATGTCAAGGACATCTTCGGAGGACTGGCTGGGTTCCTGAGGCTGTGGATTGCTGTGGTGATCTACCC$ CACCAACCAGGCTGTCATCGCCCTCACCTTCTCCAACTACGTGCTGCAGCCGCTCTTCCCCACCTGCTTCCCCCC AGAGTCTGGCCTTCGGCTCCCATCTGCTTATTGCTCCTCACATGGGTCAACTGTTCCAGTGTGCGGTG GGCCACCCGGGTTCAAGACATCTTCACAGCTGGGAAGCTCCTGGCCCTTGGCCCTGATTATCATCATGGGGATTGT ACAGATATGCAAAGGAGAGTACTTCTGGCTGGAGCCAAAGAATGCATTTGAGGATTTCCAGGAACCTGACATCGG CCTCGTCGCACTGGCTTTCCTTCAGGGCTCCTTTGCCTATGGAGGCTGGAACTTTCTGAATTACGTGACTGAGGA GCTTGTTGATCCCTACAAGAACCTTCCCAGAGCCATCTTCATCTCCATCCCACTGGTCACATTTGTGTATGTCTT TGCCAATGTCGCTTATGTCACTGCAATGTCCCCCCAGGAGCTGCTGGCATCCAACGCCGTCGCTGTGACTTTTGG AGAGAAGCTCCTAGGAGTCATGGCCTGGATCATGCCCATTTCTGTTGCCCTGTCCACATTTGGAGGAGTTAATGG GTCTCTCTCACCTCCTCGGCTGTTCTTCGCTGGAGCCCGAGAGGGCCACCTTCCCAGTGTTTTGGCCATGAT CCACGTGAAGCGCTGCACCCCAATCCCAGCCCTGCTCTTCACATGCATCTCCACCCTGCTGATGCTGGTCACCAG $\tt CGACATGTACACCTCATCAACTACGTGGGCTTCATCAACTACCTCTTCTATGGGGGCACGGTTGCTGGACAGAT$ AGTCCTTCGCTGGAAGAAGCCTGATATCCCCCGCCCCATCAAGATCAACCTGCTGTTCCCCATCATCTACTTGCT GTTCTGGGCCTTCCTGCTGGTCTCAGCCTGTGGTCAGAGCCGGTGGTGTGTGGCATTGGCCTGGCCATCATGCT GACAGGAGTGCCTGTCTATTTCCTGGGTGTTTACTGGCAACACAAGCCCAAGTGTTTCAGTGACTTCATTGAGCT GCTAACCCTGGTGAGCCAGAAGATGTGTGTGTGTCGTGTACCCCGAGGTGGAGCGGGGCTCAGGGACAGAGGAGGC TAATGAGGACATGGAGGAGCAGCAGCCCATGTACCAACCCACTCCCACGAAGGACAAGGACGTGGCGGGGCA GCCCCAGCCC<u>TGA</u>GGACCACCATTCCCTGGCTACTCTCCTCCTCCCCCTTTTATCCTACCTCCCTGCCTTGG TGGTGAGAAATTGTAAACAAAAACTGACATTCATACCCAAAGAACCAGCCTCTCACCCCAGGGTCCATGTCCCAG GCCCCACTCCAGTGCTGCCCACACTCCCAGCTGCTGGAGGAGAGGGGAGATGCCAAGGTGCCCTGCAGGACCTCC AGAGAGGAGGCCAGGAGCTGCATTGTGGGGGGGACAGGCTCAAGCAATTCTGTCCCCATCAAGGGGTCAGCTGG AGAGACCCAAGACCCTATCTGTTCACCAGGGACCCAAAATCCAAGGGGATGCTTCCCTCTGCCCTCTTTCCTGCC CCTCCCCATCATACCTGCACCCACCCCAGCCAGGGCTCCCTGTCCAGAATTCGGTTCTCCTCAGGACGCCAACTC CCAGAGCTAAGGACCAAGGAAGAACAGCCTCTCCACCCCCAAGCCAGGCGGTTGAGGAACATATTGAGAAAGG TTCAGATTGCAGAAACCCAGCCCTGCCCTGCCTCCTGCATCCAGCCCCCAACATGGTGCCAAAGCTTCCAGAAG CCCACCGTGCACTTCTCCTCTGGGCCTTGGCTTGGGACCAGGTACGAAGGATCCCCAAGCCCTTCAGGCCTGA GATCAGAGCCAGATCAGCCTTAAGTCACCTCCCATCCAAGAACTTGGCCTAAAAAATACTCCCCTATTTCTAACCC CACTCCTCGCAGGTCTCAGTGTCATGCTGTCTTGGGGCAGGGTGAAAGGGTAGTGGCAGCAGGGCCCCACTCTG

650/2825 FIGURE 583B

651/2825 FIGURE **584**

MEEGARHRNNTEKKHPGGGESDASPEAGSGGGGVALKKEIGLVSACGIIVGNIIGSGIFVSPKGVLENAGSVGLA LIVWIVTGFITVVGALCYAELGVTIPKSGGDYSYVKDIFGGLAGFLRLWIAVLVIYPTNQAVIALTFSNYVLQPL FPTCFPPESGLRLLAAICLLLLTWVNCSSVRWATRVQDIFTAGKLLALALIIIMGIVQICKGEYFWLEPKNAFED FQEPDIGLVALAFLQGSFAYGGWNFLNYVTEELVDPYKNLPRAIFISIPLVTFVYVFANVAYVTAMSPQELLASN AVAVTFGEKLLGVMAWIMPISVALSTFGGVNGSLFTSSRLFFAGAREGHLPSVLAMIHVKRCTPIPALLFTCIST LLMLVTSDMYTLINYVGFINYLFYGGTVAGQIVLRWKKPDIPRPIKINLLFPIIYLLFWAFLLVFSLWSEPVVCG IGLAIMLTGVPVYFLGVYWQHKPKCFSDFIELLTLVSQKMCVVVYPEVERGSGTEEANEDMEEQQQPMYQPTPTK DKDVAGQPQP

652/2825 FIGURE 585A

 $\verb|CCCGGGCGAGCCCGCCGCCGCCCCCTGGAGCGGATCCCCAGCCGTCCCTGGGCGTTCT|\\$ GAAAAAAGAAGAGCAGACTGAAATAGAAGGCAAGCGACAACAGCTTGACGAGCAGATACTTCTGCTGCAGCAT TCCAAGTCCAAAGTGCTTCGGGAGAAATGGCTGCTGCAGGGCATACCCGCTGGAACTGCCGAAGAGGAGGAAGCC AGGAGGCGGCAGTCTGAAGAGGATGAGTTCAGAGTCAAGCAACTTGAAGATAACATTCAGAGGCTGGAGCAAGAA ATACAAACGCTAGAAAGTGAAGAGTCCCAGATATCTGCCAAAGAGCAAATCATCCTAGAGAAACTGAAGGAAACA GAAAAATCCTTCAAGGACTTTCAGAAGGGTTTCTCCAGTACGGATGGAGATGCAGTAAATTACATTTCCTCCCAG CTTCCCGACCTGCCAATCCTCTGTTCACGAACAGCAGAACCATCACCTGGGCAGGACGGGACCAGCAGAGCGGCT GGAGTCGGGTGGGAGAATGTGCTGCTAAAGGAAGGTGAGTCAGCCTCGAACGCCACAGAAACATCCGGCCCAGAC ATGACTATCAAGAAGCCTCCCCAGCTTTCTGAGGATGATATCTGGCTAAAAAGCGAGGGAGACAACTATAGTGCC ACCCTCCTGGAGCCTGCCAGCTCTCTTTCCCCAGATCACAAAAACATGGAAATTGAGGTGTCTGTTGCAGAA TGTAAAAGTGTTCCTGGAATCACCTCTACCCCACATCCCATGGACCATCCCTCCGCTTTCTATTCACCCCCGCAT AATGGCCTCCTTACTGATCACCACGAATCCCTGGATAATGATGTTGCCAGAGAGATCCGCTATCTAGATGAGGTG CTAGAGGCCAACTGCTGTGATTCTGCTGTGGATGGAACGTACAATGGAACATCCTCCCCAGAGCCTGGTGCAGTG TCCCCCAGCCAGCCTAGAGATGCGCTGGGGGACAGCCTGCAGGTGCCTGTCAGCCCCAGCTCCACAACCAGCTCA CGGTGTTCTTCCCGAGATGGAGAGTTCACTCTCACCACACTGAAAAAGGAGGCCAAGTTTGAGCTGCGTGCCTTC CCTGGCATTGCAGCAAAATGGTGGAATCCCCCGCAGGAAAAAACCATCGAGGAGCAGCTGGACGAGGAACATCTG GAGTCGCACAAAAAGTACAAGGAGCGCAAAGAGAGAGGAGCACGCAGGAACAGTTGCTGCTGCAGAAGCAGTTA CAGCAGCAGCAGCAGCCCCCATCGCAGCTCTGCACAGCCCCTGCTCTTCTCATGAACGCGCAAGCATGATT GACAAAGCAAAGGAGGACATTGTCACAGAGCAGATAGATTTCTCTGCTGCTCGCAAACAATTTCAGCTGATGGAG AATTCCAGGCAAGCGGTGGCCAAGGGCCAGAGTACACCCAGGCTGTTCTCCATCAAGCCTTTCTACAGGCCTCTG GGGTCAGTCAACTCAGACAAGCCACTGACTAATCCGAGACCACCTTCTGTCGGGGGGACCTCCAGAAGACAGTGGT GCCTCAGCCGCCAAGGGACAGAAATCCCCCGGTGCCCTGGAGACCCCATCGGCAGCAGGAAGCCAGGGCAACACA GCCTCTCAGGGGAAGGAAGGGCCCTACAGCGAGCCTTCTAAACGTGGGCCCTTATCTAAACTGTGGGCTGAGGAT GGAGAATTTACGAGCGCCCGGGCTGTCCTCACTGTGGTCAAGGATGATGACCATGGGATTTTGGATCAGTTCTCA AGATCTGTCAATGTCTCCTTGACCCAAGAGGAGCTTGACTCTGGTCTGGACGAATTGTCGGTGAGGTCTCAGGAT ACCACAGTCCTGGAGACCCTATCCAATGATTTCAGCATGGACAACATCAGTGACAGCGGGGCATCCAATGAGACA ACCAATGCCCTCCAGGAAAATTCACTGGCTGATTTTTCTCTGCCCCAGACACCACAAACTGACAACCCCTCAGAG GGCCGAGGAGAAGGCGTCTCCAAGTCATTTAGTGATCATGGTTTCTATTCCCCTTCCTCCACGCTGGGGGACTCT CCGTTGGTTGATGACCCCTTGGAGTATCAGGCTGGCCTCCTGGTGCAGAATGCCATTCAACAAGCCATAGCCGAG CAGGTGGATAAAGCTGTGTCCAAAACCAGCAGGGATGGAGCAGCAACAGGGACCTGAAGCGACTGTAGAGGAA GCTGAAGCTGCGGCTTTCGGCTCAGAAAAGCCTCAGAGCATGTTTGAGCCACCTCAGGTGTCTTCTCCTGTTCAA GAGAAAAGGGATGTATTACCAAAGATTCTGCCTGCTGAAGACAGGGCGCTCAGGGAAAGGGGGCCCCCCCAGCCA TCGGAGCTGAGCTGAGAAGCACCCTCCCTCCTGGCCACTCAAGAATCTGACGTGATGGTTGGGCCTTTC AAGCTGAGGTCCAGGAAACAGCGGACTTTGTCCATGATTGAGGAAGAGATCCGAGCAGCTCAGGAAAGGGAAGAG GAGCTGAAGAGGCAGAGACAAGTCTTGCAGAGTACGCAGAGCCCCAGGACAAAGAATGCCCCATCACTGCCCTCC AGAACATGCTACAAAACTGCTCCAGGGAAAATAGAGAAAGTCAAACCTCCTCCATCCCCCACCACTGAAGGCCCC AGCCTGCAGCCTGACTTAGCCCCTGAAGAGGCTGCCGGAACCCAGCGCCCCAAGAATCTGATGCAGACCCTCATG GAAGACTATGAGACACACAAATCTAAAAGGCGCGAGAGAATGGATGATAGTAGTTACACTTCTAAGTTACTGTCT

653/2825 FIGURE 585B

AGCAATCCTTATGTAGACCAGAAGCTGCAATATACAATGATGAAAATGAAACGAAAAGGAAGTCCCCCCATCAGA CTCTGGACACCCAGGAATCAAAAGAGAAAGGACTTTTTTGGTGACTCAATCCCAGTGTCTGGGTTTGGGGCCAATC TACAATGGATCCAAAAGGACAAAACATGTTACAAGCAAATCAACATAGTTGCTGCAGGCGGAACTGAGACCAGCC TCTCTGGGCGATGAAGGACAATGGTGGTAGGGCCACTTAGAGAGCAGTAGGGCCCAGGCTGGTGCAGCCTACATG GCACAGGATATTTCCCTGCACCAGTTTCCCACCTGTCACTTGCAGCATCAGAGGGTGTTGCATTAACTCCATTTT CTCCAGCAGCCATAAAATGAATGGCGTTTCTCTCCATATTTGCCCAGAAGAGGCAGTTATGATTCCACTTCTCCT ACATTTAATTATTTTTAATTGAGAACAACTCATGATCACAATTCATAAAATCCATATTTTAAGACAATAGTTCTT TTAGCTTTAGGATCGTGTCTGCTTATAATATTCACTGATCTGCAGTTTATGAGAACACATTTTCACAGTTATGTT TCTTCATAGGAAAACTATATTTAGTGGGCAACAACTATTTTTATGATGGGATGGGGGAGTATATACACGTATAGA AACTCTGCCTTGGAGAGGTAGATAAGAAATAAAAAGGTGTTTATAACTATTTTGTATTATAAAGTGGGCCTT ACCAGTGTGTTTCAGGATGATACAAAGAAAAATATAGAATAGAAATAAGTGCAGGCTTGGAATCAGCTACAAATC CTAAAGATGGGGTGTGTGTGTGTGTGTGTGTGTGTACACCATTGTGTGTTTTGTAAAATGTGTATGTTCA TGAGTAAGGGTGTGTGTGTGTGTATTAAAATTCCAGAGTGACCGTGGCACTTGGGTGTACAGGTAATTCCTCC TGCAGTATTTGTAATATTAAGTTGACCTAACAAGGTATTTGCATGAGTCACAATTACAAAGTTTTGAGCGGTTTT GTAATTTGACATTTAGGAAAGTCTCCTATTTATTCTCATACTTTACATTCATGCTTAGTATACTATAGAGGATGC CAGCTTTAATCTTTCTGTCATTTAAAGCCATATGATAAGGGTATTCAATAATTGGGTGCCCTAAATTTCTGGATG TGTGGTTTTTTAAAAAAGCAATAATTAACTCAGACCTCACTAAAAATCATTTTTGTTTTTATATTGTTATGTCAT CTTCTTTATTAGACTAGTGTTGACTTTGGGGGGGGGACATTTATTCACAAATGAGAAGTAGGCACAAAGTAAAAA ATGGAACCATCTACTAACAAGGATCCTTTAAAACTGCCAAGGGAGCTCTAACTTGAAGCCACATCCTACAGATGG AACAAAATGTGCTAGCCACTGGGGACGCAAAACAAGTAAGATCCCTGTTGCAAGAAATTCATTTTATAGTGAGGG AGGTTGGCATGGAGACTAAAATTCTCAGGAAAATGAGATCCGTGTTAGATTAGAAGTCCTGATGTGAAATGGGAG GACTCAGGAAGGAGGATCGTCTTTACCTGAGGATTTCTAGCCAGAGGTCCCAGATGCCTGGGCTGAGAACCCAGC GATAAGGGGGCGTTCCCAAAGCAGACACAGGGATAAGAACAGAGGAGGAGCAGCACTTGCACAGCCCCAGGCACA GTGGCAGTTAGGATGGCTGGAGAGTAGGATAGTTCTATGGGTTGCCCAAAAAATGTGATGCGCTTCATGTTTTCT CTGACTCATGGATCTGGTAGAGACCATAGACATGATATAGACTAACTTCCCCATTTTTCACAATGAAGGTAAACC ATCCTTATGACTTACCTTAAAGTTTTTTGTTCTGTTTTGAAGGAAACCATGTGCTTCATGAAACCTACAGTTGAC AAGAGAATGTACAGCTAAGAGAAAAGCTTAAGAGGCCACACTATTCGCGGAATGGCTTTAGAGGCAGATGAAGTG GTCTTTGACCACAGTTGATTGAACCAGAGCACTTATTGCTTAAAGAATAACAGAGTTCTAGAGCTGGGGGTTCTT GGGCCATGCTCCGTGTGTGGATAAGGAAAGAATACTGTTTCTGGGACTCTCCCACAGTCACAAAGCTGTTTTCA CTGTGGCCCCTACATCTCTTAACTTTTGCTATTACTCCTATGCTGCCTTCCGGATTACTGCTGTCTATCTTCTTG CTCCACTCACTGAAGATCCTATTATAATCCCATGAAAATGTAAATTACAGTTTACTTGGGAGAGCCAGATTTTCT CTGTGCTCTTGAGTTTTTTTTTCATTCAAGAAACCTTGGGCCACCGCTTTGTACATAGCACCGTGCTAGGCTCTG GGATCCCAAATGGACCCTTTTAACTTTCTGAAGATGGGACCGTCCCCTGGAGGAAAGTCATTCCTGCCTAATCCA TCGAGAGAAAGAGGCTTACGAAAAACTTTGCCTCTGATGCTCAGCCCCACCCCCAAATAGCACACAAGCTTGTTA ACCCCACCTCTTACAAAATGTTTAGATTCTGTAGGTGTTAAAAGCCTTTCTGGAAGTATTGCATTCTGCCGTGTT TATAGGTGTTCACTTCCTCCAGAGCTGATTAACTACTGACATGACTTGGCTTTCTCATCCAGAAATTATGGAAA CAGGGTCTGTCAGTGGCAGGAGGCCGTGCTGTTTTTACTTGGATGACACAATGCAGTTTACTTGCCTCTTCATA CACATATATATATAAAGTGTAACAAGGAACACTAAAACAGTGTTGATTCTTGTCTCTGAAGACAAATAATTAA

654/2825 FIGURE 585C

655/2825 FIGURE 586

MAEAELHKERLQAIAEKRKRQTEIEGKRQQLDEQILLLQHSKSKVLREKWLLQGIPAGTAEEEEARRRQSEEDEF RVKQLEDNIQRLEQEIQTLESEESQISAKEQIILEKLKETEKSFKDFQKGFSSTDGDAVNYISSQLPDLPILCSR TAEPSPGQDGTSRAAGVGWENVLLKEGESASNATETSGPDMTIKKPPQLSEDDIWLKSEGDNYSATLLEPAASSL SPDHKNMEIEVSVAECKSVPGITSTPHPMDHPSAFYSPPHNGLLTDHHESLDNDVAREIRYLDEVLEANCCDSAV DGTYNGTSSPEPGAVVLVGGLSPPVHEATQPEPTERTASRQAPPHIELSNSSPDPMAEAERTNGHSPSQPRDALG DSLQVPVSPSSTTSSRCSSRDGEFTLTTLKKEAKFELRAFHEDKKPSKLFEDDEHEKEQYCIRKVRPSEEMLELE KERRELIRSQAVKKNPGIAAKWWNPPQEKTIEEQLDEEHLESHKKYKERKERRAQQEQLLLQKQLQQQQQQPPSQ LCTAPASSHERASMIDKAKEDIVTEQIDFSAARKQFQLMENSRQAVAKGQSTPRLFSIKPFYRPLGSVNSDKPLT NPRPPSVGGPPEDSGASAAKGQKSPGALETPSAAGSQGNTASQGKEGPYSEPSKRGPLSKLWAEDGEFTSARAVL TVVKDDDHGILDQFSRSVNVSLTQEELDSGLDELSVRSQDTTVLETLSNDFSMDNISDSGASNETTNALQENSLA DFSLPQTPQTDNPSEGRGEGVSKSFSDHGFYSPSSTLGDSPLVDDPLEYQAGLLVQNAIQQAIAEQVDKAVSKTS RDGAEQQGPEATVEEAEAAAFGSEKPQSMFEPPQVSSPVQEKRDVLPKILPAEDRALRERGPPQPLPAVQPSGPI NMEETRPEGSYFSKYSEAAELRSTASLLATQESDVMVGPFKLRSRKQRTLSMIEEEIRAAQEREEELKRQRQVLQ STQSPRTKNAPSLPSRTCYKTAPGKIEKVKPPPSPTTEGPSLQPDLAPEEAAGTQRPKNLMQTLMEDYETHKSKR RERMDDSSYTSKLLSCKVTSEVLEATRVNRRKSALALRWEAGIYANQEEEDNE

656/2825 FIGURE 587A

CCCGGGCGAGCCCGTGCGCACAGCTCTGCCCGCCCCTGGAGCGGATCCCCAGCCGTCCCTGGGCGTTCT $\verb|CTTTCCCCTGCCTGTGTGCCCTTCTCCAGG| \textbf{ATC} \\ \texttt{GCAGAGGCGGAATTGCACAAGGAAAGGCTGCAAGCCATAGCA} \\ \\ \texttt{CTTTCCCCTGCCTGTGTGCCAAGCCATAGCA} \\ \texttt{CTTTCCCCTGCCTGTGTGCCAAGCCATAGCA} \\ \texttt{CTTTCCCCTGCCTGTGTGCCAAGCCATAGCA} \\ \texttt{CTTTCCCCTGCCTGTGTGCCAAGCCATAGCA} \\ \texttt{CTTTCCCCTGCCTGTGTGCCAAGCCCATAGCA} \\ \texttt{CTTTCCCCTGCCTGTGTGCCAAGCCCATAGCA} \\ \texttt{CTTTCCCCTGCCTGTGTGCAAGCCCATAGCA} \\ \texttt{CTTTCCCCTGCCTGCCAAGCCCATAGCA} \\ \texttt{CTTTCCCCTGCCTGCCAAGCCCATAGCA} \\ \texttt{CTTTCCCCTGCCTGCCAAGCCCATAGCA} \\ \texttt{CTTTCCCCCTGCCAAGCCCATAGCA} \\ \texttt{CTTTCCCCCTGCCCAAGCCCATAGCA} \\ \texttt{CTTTCCCCCTGCCAAGCCCATAGCA} \\ \texttt{CTTTCCCCCTGCCCAAGCCCATAGCA} \\ \texttt{CTTTCCCCCTGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCAAGCCAAGCCAAGCCCAAGCCCAAGCCAAGCCAAGCCCAAGCCCAAGCCCAAGCCAAGCCAAGCCAAGCCAAGCCAAGCCAAGCCAAGCCAAGCCAAGCCAAGCCAAGCCAAGCCAAGCCAAGCCAAGCCAAGCCAAGCAAAGCCAAGCAAGCCAAGCCAAGCCAAGCCAAGCCAAGCCAAGCAAGCCA$ GAAAAAAGAAGGCAGACTGAAATAGAAGGCAAGCGACAACAGCTTGACGAGCAGATACTTCTGCTGCAGCAT TCCAAGTCCAAAGTGCTTCGGGAGAAATGGCTGCTGCAGGGCATACCCGCTGGAACTGCCGAAGAGGAGGAAGCC AGGAGGCGGCAGTCTGAAGAGGATGAGTTCAGAGTCAAGCAACTTGAAGATAACATTCAGAGGCTGGAGCAAGAA ATACAAACGCTAGAAAGTGAAGAGTCCCAGATATCTGCCAAAGAGCAAATCATCCTAGAGAAACTGAAGGAAACA GAAAAATCCTTCAAGGACTTTCAGAAGGGTTTCTCCAGTACGGATGGAGATGCAGTAAATTACATTTCCTCCCAG CTTCCCGACCTGCCAATCCTCTGTTCACGAACAGCAGAACCATCACCTGGGCAGGACGGGACCAGCAGCGGCT GGAGTCGGGTGGGAGAATGTGCTGCTAAAGGAAGGTGAGTCAGCCTCGAACGCCACAGAAACATCCGGCCCAGAC ATGACTATCAAGAAGCCTCCCCAGCTTTCTGAGGATGATATCTGGCTAAAAAGCGAGGGAGACAACTATAGTGCC ACCCTCCTGGAGCCTGCCAGCTCTCTTTCCCCAGATCACAAAAACATGGAAATTGAGGTGTCTGTTGCAGAA TGTAAAAGTGTTCCTGGAATCACCTCTACCCCACATCCCATGGACCATCCCTCCGCTTTCTATTCACCCCCGCAT AATGGCCTCCTTACTGATCACCACGAATCCCTGGATAATGATGTTGCCAGAGAGATCCGCTATCTAGATGAGGTG CTAGAGGCCAACTGCTGTGATTCTGCTGTGGATGGAACGTACAATGGAACATCCTCCCCAGAGCCTGGTGCAGTG TCCCCCAGCCAGCCTAGAGATGCGCTGGGGGACAGCCTGCAGGTGCCTGTCAGCCCCAGCTCCACAACCAGCTCA CGGTGTTCTTCCCGAGATGGAGAGTTCACTCTCACCACACTGAAAAAGGAGGCCAAGTTTGAGCTGCGTGCCTTC AGGCCTTCAGAGGAGATGCTGGAAGAAGGAGGAGGAGAGAGCTCATCCGCAGCCAGGCCGTCAAGAAGAAT CCTGGCATTGCAGCAAAATGGTGGAATCCCCCGCAGGAAAAAACCATCGAGGAGCAGCTGGACGAGGAACATCTG GAGTCGCACAAAAAGTACAAGGAGCGCAAAGAGAGAGGGCACAGCAGGAACAGTTGCTGCTGCAGAAGCAGTTA ${\tt CAGCAGCAGCAGCAGCCCCCATCGCAGCTCTGCACAGCCCCTGCCTCTTCTCATGAACGCGCAAGCATGATT}$ GACAAAGCAAAGGAGACATTGTCACAGAGCAGATAGATTTCTCTGCTGCTCGCAAACAATTTCAGCTGATGGAG AATTCCAGGCAAGCGGTGGCCAAGGGCCAGAGTACACCCAGGCTGTTCTCCATCAAGCCTTTCTACAGGCCTCTG GGGTCAGTCAACTCAGACAAGCCACTGACTAATCCGAGACCACCTTCTGTCGGGGGACCTCCAGAAGACAGTGGT GCCTCAGCCGCCAAGGGACAGAAATCCCCCGGTGCCCTGGAGACCCCATCGGCAGCAGGAAGCCAGGGCAACACA GCCTCTCAGGGGAAGGAAGGGCCCTACAGCGAGCCTTCTAAACGTGGGCCCTTATCTAAACTGTGGGCTGAGGAT GGAGAATTTACGAGCGCCCGGGCTGTCCTCACTGTGGTCAAGGATGATGACCATGGGATTTTTGGATCAGTTCTCA AGATCTGTCAATGTCTCCTTGACCCAAGAGGAGCTTGACTCTGGTCTGGACGAATTGTCGGTGAGGTCTCAGGAT ACCACAGTCCTGGAGACCCTATCCAATGATTTCAGCATGGACAACATCAGTGACAGCGGGGCATCCAATGAGACA ACCAATGCCCTCCAGGAAAATTCACTGGCTGATTTTTCTCTGCCCCAGACACCACAAACTGACAACCCCTCAGAG GGCCGAGGAGAGGCGTCTCCAAGTCATTTAGTGATCATGGTTTCTATTCCCCTTCCTCCACGCTGGGGGACTCT CCGTTGGTTGATGACCCCTTGGAGTATCAGGCTGGCCTCCTGGTGCAGAATGCCATTCAACAAGCCATAGCCGAG CAGGTGGATAAAGCTGTGTCCAAAACCAGCAGGGATGGAGCAGAGCAACAGGGACCTGAAGCGACTGTAGAGGAA GCTGAAGCTGCGGCTTTCGGCTCAGAAAAGCCTCAGAGCATGTTTGAGCCACCTCAGGTGTCTTCTCCTGTTCAA GAGAAAAGGGATGTATTACCAAAGATTCTGCCTGCTGAAGACAGGGCGCTCAGGGAAAGGGGGCCCCCCAGCCA TCGGAGGCAGCTGAGCAGCACAGCCTCCCTCCTGGCCACTCAAGAATCTGACGTGATGGTTGGGCCTTTC AAGCTGAGGTCCAGGAAACAGCGGACTTTGTCCATGATTGAGGAAGAGATCCGAGCAGCTCAGGAAAGGGAAGAG GAGCTGAAGAGCAGAGACAAGTCTTGCAGAGTACGCAGAGCCCCAGGACAAAGAATGCCCCATCACTGCCCTCC AGAACATGCTACAAAACTGCTCCAGGGAAAATAGAGAAAGTCAAACCTCCTCCATCCCCCACCACTGAAGGCCCC AGCCTGCAGCCTGACTTAGCCCCTGAAGAGGCTGCCGGAACCCAGCGGCCCCAAGAATCTGATGCAGACCCTCATG GAAGACTATGAGACACACAAATCTAAAAGGCGCGAGAGAATGGATGATAGTAGTTACACTTCTAAGTTACTGTCT GCAGGGATCTATGCCAACCAGGAGGAAGAAGACAACGAA<u>TAA</u>ACTTCCTTCAACCCAGGAAGCGTCTTTGGTGCT

657/2825 FIGURE 587B

AGCAATCCTTATGTAGACCAGAAGCTGCAATATACAATGATGAAAATGAAACGAAAAGGAAGTCCCCCCATCAGA CTCTGGACACCCAGGAATCAAAAGAGAAAGGACTTTTTTGGTGACTCAATCCCAGTGTCTGGTTTTGGGGCCAATC TACAATGGATCCAAAAGGACAAAACATGTTACAAGCAAATCAACATAGTTGCTGCAGGCGGAACTGAGACCAGCC TCTCTGGGCGATGAAGGACAATGGTGGTAGGGCCACTTAGAGAGCAGTAGGGCCCAGGCTGGTGCAGCCTACATG GCACAGGATATTTCCCTGCACCAGTTTCCCACCTGTCACTTGCAGCATCAGAGGGTGTTGCATTAACTCCATTTT CTCCAGCAGCCATAAAATGAATGGCGTTTCTCTCCATATTTGCCCAGAAGAGGCAGTTATGATTCCACTTCTCCT ACATTTAATTATTTTTAATTGAGAACAACTCATGATCACAATTCATAAAATCCATATTTTAAGACAATAGTTCTT TTAGCTTTAGGATCGTGTCTGCTTATAATATTCACTGATCTGCAGTTTATGAGAACACATTTTCACAGTTATGTT TCTTCATAGGAAAACTATTTTAGTGGGCAACAACTATTTTTATGATGGGATGGGGGAGTATATACACGTATAGA AACTCTGCCTTGGAGAGGTAGATGATAAGAAATAAAAAGGTGTTTTATAACTATTTTGTATTATAAAGTGGGCCTT ACCAGTGTGTTTCAGGATGATACAAAGAAAAATATAGAATAGAAATAAGTGCAGGCTTGGAATCAGCTACAAATC CTAAAGATGGGGTGTGTGTGTGTGTGTGTGTGTGTACACCATTGTGTGTTTTGTAAAATGTGTATGTTCA TGAGTAAGGGTGTGTGTGTGTGTATTAAAATTCCAGAGTGACCGTGGCACTTGGGTGTACAGGTAATTCCTCC AGAGCTGTTTGCTGGCTTCAGGAGTGGAGTGAGAATTTCTTTTTTATGAAAAGGGATATAAAGGCACCGAGCTGA TGCAGTATTTGTAATATTAAGTTGACCTAACAAGGTATTTGCATGAGTCACAATTACAAAGTTTTGAGCGGTTTT GTAATTTGACATTTAGGAAAGTCTCCTATTTATTCTCATACTTTACATTCATGCTTAGTATACTATAGAGGATGC CAGCTTTAATCTTTCTGTCATTTAAAGCCATATGATAAGGGTATTCAATAATTGGGTGCCCTAAATTTCTGGATG TGTGGTTTTTTAAAAAAGCAATAATTAACTCAGACCTCACTAAAAATCATTTTTGTTTTTATATTGTTATGTCAT CTTCTTTATTAGACTAGTGTTGACTTTGGGGGGGGACATTTATTCACAAATGAGAAGTAGGCACAAAGTAAAAA ATGGAACCATCTACTAACAAGGATCCTTTAAAACTGCCAAGGGAGCTCTAACTTGAAGCCACATCCTACAGATGG AACAAAATGTGCTAGCCACTGGGGACGCAAAACAAGTAAGATCCCTGTTGCAAGAAATTCATTTTATAGTGAGGG AGGTTGGCATGGAGACTAAAATTCTCAGGAAAATGAGATCCGTGTTAGATTAGAAGTCCTGATGTGAAATGGGAG GACTCAGGAAGGAGGATCGTCTTTACCTGAGGATTTCTAGCCAGAGGTCCCAGATGCCTGGGCTGAGAACCCAGC GATAAGGGGGCGTTCCCAAAGCAGACACAGGGATAAGAACAGAGGAGGAGCAGCACTTGCACAGCCCCAGGCACA GTGGCAGTTAGGATGGCTGGAGAGTAGGATAGTTCTATGGGTTGCCCAAAAAATGTGATGCGCTTCATGTTTTCT CTGACTCATGGATCTGGTAGAGACCATAGACATGATATAGACTAACTTCCCCATTTTTCACAATGAAGGTAAACC ATCCTTATGACTTACCTTAAAGTTTTTTGTTCTGTTTTGAAGGAAACCATGTGCTTCATGAAACCTACAGTTGAC AAGAGAATGTACAGCTAAGAGAAAAGCTTAAGAGGCCACACTATTCGCGGAATGGCTTTAGAGGCAGATGAAGTG GTCTTTGACCACAGTTGATTGAACCAGAGCACTTATTGCTTAAAGAATAACAGAGTTCTAGAGCTGGGGGTTCTT GGGCCATGCTCCGTGTGTGGATAAGGAAAGAATACTGTTTCTGGGACTCTCCCACAGTCACAAAGCTGTTTTCA CTGTGGCCCCTACATCTCTTAACTTTTGCTATTACTCCTATGCTGCCTTCCGGATTACTGCTGTCTATCTTCTTG CTCCACTCACTGAAGATCCTATTATAATCCCATGAAAATGTAAATTACAGTTTACTTGGGAGAGCCAGATTTTCT CTGTGCTCTTGAGTTTTTTTTTCATCAAGAAACCTTGGGCCACCGCTTTGTACATAGCACCGTGCTAGGCTCTG GGATCCCAAATGGACCCTTTTAACTTTCTGAAGATGGGACCGTCCCCTGGAGGAAAGTCATTCCTGCCTAATCCA TCGAGAGAAAGAGGCTTACGAAAAACTTTGCCTCTGATGCTCAGCCCCACCCCCAAATAGCACACAAGCTTGTTA ACCCCACCTCTTACAAAATGTTTAGATTCTGTAGGTGTTAAAAGCCTTTCTGGAAGTATTGCATTCTGCCGTGTT TATAGGTGTTCACTTCCTCCAGAGCTGATTAACTACTGACATGACTTGGCTTTCTCATCCAGAAATTATGGAAA ${\tt CAGGGTCTGTCAGTGGCAGGAGGCCGTGCTGTTTTTACTTGGATGACACAATGCAGTTTACTTGCCTCTTCATA}$ CACATATATATATAAAGTGTAACAAGGAACACTAAAACAGTGTTGATTCTTGTCTCTGAAGACAAATAATTAA

658/2825 FIGURE 587C

659/2825 FIGURE 588

MAEAELHKERLQAIAEKRKRQTEIEGKRQQLDEQILLLQHSKSKVLREKWLLQGIPAGTAEEEEARRRQSEEDEF RVKQLEDNIQRLEQEIQTLESEESQISAKEQIILEKLKETEKSFKDFQKGFSSTDGDAVNYISSQLPDLPILCSR TAEPSPGQDGTSRAAGVGWENVLLKEGESASNATETSGPDMTIKKPPQLSEDDIWLKSEGDNYSATLLEPAASSL SPDHKNMEIEVSVAECKSVPGITSTPHPMDHPSAFYSPPHNGLLTDHHESLDNDVAREIRYLDEVLEANCCDSAV DGTYNGTSSPEPGAVVLVGGLSPPVHEATQPEPTERTASRQAPPHIELSNSSPDPMAEAERTNGHSPSQPRDALG DSLQVPVSPSSTTSSRCSSRDGEFTLTTLKKEAKFELRAFHEDKKPSKLFEDDEHEKEQYCIRKVRPSEEMLELE KERRELIRSQAVKKNPGIAAKWWNPPQEKTIEEQLDEEHLESHKKYKERKERRAQQEQLLLQKQLQQQQQQPPSQ LCTAPASSHERASMIDKAKEDIVTEQIDFSAARKQFQLMENSRQAVAKGQSTPRLFSIKPFYRPLGSVNSDKPLT NPRPPSVGGPPEDSGASAAKGQKSPGALETPSAAGSQGNTASQGKEGPYSEPSKRGPLSKLWAEDGEFTSARAVL TVVKDDDHGILDQFSRSVNVSLTQEELDSGLDELSVRSQDTTVLETLSNDFSMDNISDSGASNETTNALQENSLA DFSLPQTPQTDNPSEGRGEGVSKSFSDHGFYSPSSTLGDSPLVDDPLEYQAGLLVQNAIQQAIAEQVDKAVSKTS RDGAEQQGPEATVEEAEAAAFGSEKPQSMFEPPQVSSPVQEKRDVLPKILPAEDRALRERGPPQPLPAVQPSGPI NMEETRPEGSYFSKYSEAAELRSTASLLATQESDVMVGPFKLRSRKQRTLSMIEEEIRAAQEREEELKRQRQVLQ STQSPRTKNAPSLPSRTCYKTAPGKIEKVKPPPSPTTEGPSLQPDLAPEEAAGTQRPKNLMQTLMEDYETHKSKR RERMDDSSYTSKLLSCKVTSEVLEATRVNRRKSALALRWEAGIYANQEEEDNE

660/2825 FIGURE 589

 $\tt TTGCTGCATAGATTACAACGGTG{\color{blue}ATG}CGGGCCAAGCGGTCCGGCTGGAGCCGGCCGCTCTCCTCCAGCTCCTTC{\color{blue}CTTCCTCCAGCTCCTTC}$ TCGGCGTGAACCTGGTGGTGATGCCGCCCACCCGGGCCCGGAGTCTGCGCTTCGTTACCTTGCTGTACCGCCATG GAGACCGTTCACCAGTGAAGACATATCCCAAGGACCCCTATCAGGAAGAAGAATGGCCCCAGGGGTTTGGTCAGT TAACCAAGGAGGGGATGCTACAGCACTGGGGAACTGGGCCAGGCCCTGCGGCAGCGCTATCACGGCTTCCTAAACA CCTCTTATCACCGGCAAGAGGTTTATGTGCGAAGCACAGACTTTGACCGGACTCTCATGAGTGCTGAGGCCAACC TGGCTGGACTCTTCCCTCCCAACGGGATGCAGCGCTTCAACCCGAACATCTCGTGGCAGCCTATTCCTGTGCACA CTGTGCCCATCACTGAGGACAGGCTGCTGAAGTTCCCGTTGGGCCCATGTCCCCGTTATGAGCAGCTGCAGAACG AGACCCGGCAGACACCAGAGTATCAGAATGAGAGTTCTCGGAATGCACAATTTCTGGACATGGTGGCCAACGAGA CAGGGCTTACAGACCTGACACTGGAGACCGTCTGGAATGTCTATGACACACTCTTCTGTGAGCAAACGCACGGGC TGCGCCTGCCCCTGGGCCTCACCCCAAACCATGCAGCGTCTCAGCCGGCTAAAGGACTTCAGCTTCCGCTTCC TCTTCGGAATCTACCAGCAGGCGGAGAAGGCCCGGCTTCAGGGGGGGAGTCCTGCTGGCTCAGATAAGGAAGAACC TGACCCTAATGGCGACCACCTCCCAGCTCCCCAAGCTGCTGGTTTACTCTGCGCACGACACTACCCTGGTTGCCC TGCAAATGGCACTGGATGTCTACAATGGTGAACAAGCCCCCTACGCCTCCTGCCACATATTTGAACTGTACCAGG AAGATTCTGGGAATTTCTCAGTGGAGATGTACTTTCGGAACGAGAGTGACAAGGCCCCCTGGCCGCTCAGCCTGC CTGGCTGCCCTCACCGCTGCCCACTGCAGGACTTCCTTCGCCTCACAGAGCCCGTCGTGCCCAAGGATTGGCAGC AGGAGTGCCAGCTGGCAAGCGGTCCTGCAGACACAGAGGTGATTGTGGCCTTGGCTGTATGTGGCTCCATCCTCT TCCTCCTCATAGTGCTGCTCCTCACCGTCCTCTCCGGATGCAGGCCCAGCCTCCTGGCTACCGCCACGTCGCAG ATGGGGAGGACCACGCC**TGA**CAACCACTCAGCCCCCTTCCCTCCACCTCCTAGGGGAGGTGGGCTGGGCCCTCGC TGAGCGAGTGGGGCTCAGCGTGGCCCATGGTGCCTGTCACTCAGCATTCCCATGCCTGATGTTTACCAAGTGCTG TGTTGGACACTGGCTTTCTCCAAACAGGATTTGCCTCCTCCACGCTCCCTACACACCTGAGATGTAAACTGGCAG TCAGTGTTCACTCAGGACCTAGGATTAGAAAATGGCAGAGTTGGTGCTGGATCCACCTTGCACTTCTATCAAGCC CTGTTCTTTTCCTCCAGCCTGAAGTCTTCGGCAAATAGCTCAGAGGGACACGGTCTTGCCTCTCAGTGCTTATT CGAATCAGGAAACTGCTCTCCCTCAGCTGGGCTGGGGTCTCCAGGGACCTGAGCTACATGCAGGTTGTGAGCTGG **GGACTGATA**

661/2825 FIGURE **590**

MAGKRSGWSRAALLQLLLGVNLVVMPPTRARSLRFVTLLYRHGDRSPVKTYPKDPYQEEEWPQGFGQLTKEGMLQ
HWELGQALRQRYHGFLNTSYHRQEVYVRSTDFDRTLMSAEANLAGLFPPNGMQRFNPNISWQPIPVHTVPITEDR
LLKFPLGPCPRYEQLQNETRQTPEYQNESSRNAQFLDMVANETGLTDLTLETVWNVYDTLFCEQTHGLRLPPWAS
PQTMQRLSRLKDFSFRFLFGIYQQAEKARLQGGVLLAQIRKNLTLMATTSQLPKLLVYSAHDTTLVALQMALDVY
NGEQAPYASCHIFELYQEDSGNFSVEMYFRNESDKAPWPLSLPGCPHRCPLQDFLRLTEPVVPKDWQQECQLASG
PADTEVIVALAVCGSILFLLIVLLLTVLFRMQAQPPGYRHVADGEDHA

662/2825 FIGURE **591A**

CATTCATAAGACTCAGAGCTACGGCCACGGCAGGGACACGCGGAACCAAGACTTGGAAACTTGATTGTTGTGTT ATTTCTTCATTTTCTTTTGGAGGACCGACTTACTTTTTTTGGTCTTCTTTATTACTCCCCTCCCCCGTGGGACC CGCCGGACGCGTGGAGGACCGTAGCTGAAGCTGATTCTGTACAGCGGGACAGCGCTTTCTGCCCCTGGGGGAG CAACCCCTCCCTCGCCCTGGGTCCTACGGAGCCTGCACTTTCAAGAGGTACAGCGGCATCCTGTGGGGGCCTGG GCACCGCAGGAAGACTGCACAGAAACTTTGCCATTGTTGGAACGGGACGTTGCTCCTTCCCCGAGCTTCCCCGGA CAGCGTACTTTGAGGACTCGCTCAGCTCACCGGGGACTCCCACGGCTCACCCCGGACTTGCACCTTACTTCCCCA ACCCGCCATAGCCTTGGCTTCCCGGCGACCTCAGCGTGGTCACAGGGGCCCCCCTGTGCCCAGGGAA**ATG**TTTC AGGCTTTCCCCGGAGACTACGACTCCGGCTCCCGGTGCAGCTCCTCACCCTCTGCCGAGTCTCAATATCTGTCTT CGGTGGACTCCTTCGGCAGTCCACCCCCCGCGGCCTCCCAGGAGTGCGCCGGTCTCGGGGAAATGCCCGGTT CCATGGCCCAGTCCCAGGGGCAGCCACTGGCCTCCAGCCCCGGTCGTCGACCCCTACGACATGCCGGGAACCA GCTACTCCACACCAGGCATGAGTGGCTACAGCAGTGGCGGAGCGAGTGGCAGTGGTGGCCCTTCCACCAGCGGAA CTACCAGTGGGCCTGGCCCGCCCAGCCCGAGCCCGGCCTAGGAGACCCCGAGAGGAGACGCTCACCCCAG AGGAAGAGGAGAAGCGAAGGGTGCGCCGGGAACGAAATAAACTAGCAGCAGCTAAATGCAGGAACCGGCGGAGGG AGCTGACCGACCCAGCCGAGACAGATCAGTTGGAGGAAGAAAAAGCAGAGCTGGAGTCGGAGATCGCCG AGCTCCAAAAGGAGAACGTCTGGAGTTTGTGCTGGTGGCCCACAAACCGGGCTGCAAGATCCCCTACGAAG AGGGGCCCGGGCCGGCCGCTGGCGGAGGTGAGAGATTTGCCGGGCTCAGCACCGGCTAAGGAAGATGGCTTCA GCTGGCTGCCGCCCCGCCACCACCGCCCTTCCAGACCAGCCAAGACGCACCCCCAACCTGACGG CTTCTCTTTTACACACAGTGAAGTTCAAGTCCTCGGCGACCCCTTCCCCGTTGTTAACCCTTCGTACACTTCTT CGTTTGTCCTCACCTGCCCGGAGGTCTCCGCGTTCGCCGGCGCCCAACGCACCAGCGGCAGTGACCAGCCTTCCG TGGCTCCTCCGTCTGACCCTCTGCGGCCACTGCGCCATCGGACAGGAGGATTCCTTGTGTTTTGTCCTG $\verb|CCTCTTGTTTCTGTGCCCCGGCGAGGCCGGAGAGCTGGTGACTTTGGGGACAGGGGGTGGGAAGGGGATGGACAC| \\$ GTTGGTTTCCCCTGCACTCCCGACCTTAGCTTATTGATCCCACATTTCCATGGTGTGAGATCCTCTTTACTCTGG GCAGAAGTGAGCCCCCCTTAAAGGGAATTCGATGCCCCCCTAGAATAATCTCATCCCCCCACCCGACTTCTTTT TCCTAAGGCTCCCCACCCCGAAATCAGCCCCCAGCCTTGTTTCTGATGACAGTGTTATCCCAAGACCCTGCCCC TGCCAGCCGACCCTCCTGGCCTTCCTCGTTGGGCCGCTCTGATTTCAGGCAGCAGGGGCTGCTGTGATGCCGTCC GGGGATAATGTCCCCACTCCCGAAAGCCTTTCCTCGGTCTCCCTTCCGTCCATCCCCCTTCTTCCTCCCCTCAAC TCCTCAGGACCCTCAGCCCTGGCCTTTTTCTTTAAGGTCCCCCGACCAATCCCCAGCCTAGGACGCCAACTTCTC CCACCCTTGGCCCCTCACATCCTCTCCAGGAAGGCAGTGAGGGGCTGTGACATTTTTCCGGAGAAGATTTCAGA GCTGAGGCTTTGGTACCCCCAAACCCCCAATATTTTTGGACTGGCAGACTCAAGGGGCTGGAATCTCATGATTCC ATGCCCGAGTCCGCCCATCCTGACCATGGTTTTGGCTCTCCCACCCCGCCGTTCCCTGCGCTTCATCTCATGAG GATTTCTTTATGAGGCAAATTTATATTTTTTAATATCGGGGGGTGGACCACGCCGCCCTCCATCCGTGCTGCATG AAAAACATTCCACGTGCCCCTTGTCGCGCGTCTCCCATCCTGATCCCAGACCCATTCCTTAGCTATTTATCCCTT CGCGTGAGTGTGTGAGCGCTTCTGCAGCCTCGGCCTAGGTCACGTTGGCCCTCAAAGCGAGCCGTTGAATTGGAA ACTGCTTCTAGAAACTCTGGCTCAGCCTGTCTCGGGCCTGACCCTTTTCTGATCGTCTCGGCCCCTCTGATTGTTC AGACTGAGGGATCGTAGATTTTTACAATCTGTATCTTTGACAATTCTGGGTGCGAGTGTGAGAGTGTGAGCAGGG

663/2825 FIGURE **591B**

 $\tt CTTGCTCCTGCCAACCACAATTCAATGAATCCCCGACCCCCTACCCCATGCTGTACTTGTGGTTCTCTTTTTGTATTTTGCATCTGACCCCGGGGGGCCTGGGACAGATTGGCAATGGGCCGTCCCCTCTCCCCTTGGTTCTGCACTGTTGCCAATAAAAAGCTCTTAAAAAACGC$

664/2825 FIGURE **592**

 $\label{thm:polydoscal} MFQAFPGDYDSGSRCSSSPSAESQYLSSVDSFGSPPTAAASQECAGLGEMPGSFVPTVTAITTSQDLQWLVQPTL\\ ISSMAQSQGQPLASQPPVVDPYDMPGTSYSTPGMSGYSSGGASGSGGPSTSGTTSGPGPARPARARPRRPREETL\\ TPEEEEKRRVRRERNKLAAAKCRNRRRELTDRLQAETDQLEEEKAELESEIAELQKEKERLEFVLVAHKPGCKIP\\ YEEGPGPGPLAEVRDLPGSAPAKEDGFSWLLPPPPPPPLPFQTSQDAPPNLTASLFTHSEVQVLGDPFPVVNPSY\\ TSSFVLTCPEVSAFAGAQRTSGSDQPSDPLNSPSLLAR$

665/2825 FIGURE 593A

AGCTGGGGCGACCCTTGCTGGAGGTACTGGCCTCAGCCCTTTCTCCCGCTTCCCCACCCCTCTTACCCCCAGATT ACATTCTCTGTGTGTGTCTTTACTGCAGATGAAGGATTTGGGGGGCAGAGCACTTGGCAGGTCATGAAGGGGTCC AACTTCTCGGGTTGTTGAACGTCTACCTGGAACAAGAAGAGAGATTCCAACCTCGAGAAAAAGGGCTGAGTTTGA TTGAGGCTACCCCGGAGAATGATAACACTTTGTGTCCAGGATTGAGAAATGCCAAAGTTGAAGATTTAAGGAGTT TAGCCAACTTTTTTGGATCTTGCACTGAAACTTTTGTCCTGGCTGTCAATATTTTTGGACAGGTTCTTGGCTCTTA ACTGCAATATTCCATCCACTCATGATGTGATCCGGATTAGTCAGTGTAAATGTACTGCTTCTGACATAAAACGGA TGGAAAAAATAATTTCAGAAAAATTGCACTATGAATTGGAAGCTACTACTGCCTTAAACTTTTTGCACTTATACC ATACTATTATACTTTGTCATACTTCAGAAAGGAAAGAAATACTGAGCCTTGATAAACTAGAAGCTCAGCTGAAAG $\verb|CTTGCAACTGCCGACTCATCTTTCAAAAGCAAAACCATCTGTATTAGCCTTGTGCCTTCTCAATTTGGAAGTGG|\\$ AAACTTTGAAATCTGTTGAATTACTGGAAATTCTCTTGCTAGTTAAAAAACATTCCAAGATTAATGACACTGAGT TCTTCTACTGGAGAGAGTTGGTTTCTAAATGCCTAGCCGAGTATTCTTCTCCTGAATGTTGCAAACCAGATCTTA AGAAGTTGGTTTGGATCGTTTCAAGGCGCACAGCCCAGAACCTCCACAACAGCTACTATAGTGTTCCTGAGCTGC CAACGATACCTGAGGGGGGTTGTTTTGATGAAAGTGAAAGTGAGGACTCTTGTGAAGATATGAGTTGTGGAGAGG AGAGTCTCAGCAGCTCTCCCCCAGTGATCAAGAGTGCACCTTCTTTTTCAACTTCAAAGTGGCACAAACACTGT GCTTTCCATCT<u>TAG</u>AAATCTGATTGTTCTGTCAGAATTTATATTTACAGGTTTCAAAGCAATAAATGGGGGAATA ATCAGATCTGGCCTATTTTCATATTTATCCTAAGCCATCAAATGGGGTAGTGCCTCTTAAACCATTAACAGTACT TTAGACATTGGCACTTTATTTTTCTCGTAGATCTTTAGCTACTTTGGGGAGGGGAGGGGAAGGTGCTGATACCTTCAA TTTGTTACTTTCAAGATTTTTAAAAATAACTAGTGTAGCTTATCTTAAACATTTTATAAAACCTTCAGATGTCT TTAAGCAGATTGGAAGTATGCAAGTGCTTCCTTAGCAGGGACAGTGGATAATCCTTAATGGTTTATCATAGATTT GATCAGTGTCTATTTGATGTGATGCAGATCTTATAAATTTTGGGAATTATAATATTGACATTTCTGTGATTTTTAT ATATGTAATGTCTTAATTGAGATTTCTGTTAAGGCAGAAATAATTAGGCTAGGGCTCTTAGTTTTCATTCCTATT GCCCAAGTATTGTCAAACTATGGTATTATTTTAATGTTACTTTAAAAATCCATAATCTGCTAGTTTTTGCATGTAC TTATATGAAAACAGTGCAGTAAGTTGAAAACTCAGTATCTATGGAATTGATAAATGTTGATCTGGTGTAGTATAT TTTATCGCATTTTCTTATATTAAAAAATGTCTGCATGATTACATTTTATTTCCTTTGTAATTTACATTTCAGAAT AGTGTATTGCTATATGGGTGCCAAGATTGAATATGAAGAACCCGAGTGTTTGTAGTATTATAGTTTTTAAGCAAAT CTGTGTGGTGATACAGCCATAAGAATGGGGCTTATATAAACTCTGTACATGTAAGATTTTGTACAGAGAATTTTT AACTTTATAAATTGTATATGAACATGTAAATCTTTTAAAATGTACATAAAATACTGTATTTTTTTACCTTGTGTG TGATAGTCTAGTCATTGCATGTAAATATAATTTATTATGTATTCTGTAGTATAAATCATACATTGATGACTTACA TTTTTACTGGTAAGTCAACATCCGTTGGATGTTTTCTGAAGTGGCTCTTTTTGAAGTGATAAATAGATTGTAATTC AAAATAAAATTATTAATGAATTCTCCTTGTTTGGGATCACATCTTAATTTTTAATCTGTTAAAAGTTCTTGATGT ATTTTAATGAGAAGACTTTAGGTGAGGCTACAGTGATTCCAGAGTGAGCCTTCTAACTGGCTAGCAGAAGTTCTC TAGGTTTGGCATCTGTGCCTTGGAGATACTGAAAGAGAATCTGTCATTTGACAATTGACCTCTTTGTGGGATGGA CTCATTAAGTATGCTCTCAGAGACTGGTATATTACCAGAATGCCTATTAATTTTCAGTGAGAGGCAACAGGTATT AAGTAGAACAGAATGCTCAGGTTGGCAGATTAGAACGATCTTTCAGGAGACAAAGCAAGTTTTAATCAGTTGTTT GGTTAATAAGTATGGGGTGTTCGCTGTGATAGGGCCCCGCCAGCTTCTGGCTCTTGTGGACCTCAAAAGTATCAG GTGGTTTTGCAAGTGGTGGTCCTTTCCCCTGCCCCACCCCAATAGGTTCCCCATCTGTCTAGTTTGATTTTTGTA GACCTTTGTTTTCTCTAGTTAGAAAATCAGGTACACTGAATATGGTTTTCATGTAACACCTCTTCTCTGGAGATA GGGGTATGTTTTCCTACCCTTCTAGTGGAGAATCCTACTTGAGGATGACCTTTCCTCTCTTACTAAATAATATTA GTAAATAGTGGGCAATATATTCTGCTTTCAGATTTTGATTTGTTGAGATGTAAAAGTTGTTTGGGGCTTACCAAA TCTCAAGACTCTCTTTAGCTCCTGCAGGATTGTATTGCTTTTCTTACTGGATATTTTTCCTGGGTAAGCATCTTT GTGGCTTCATCTCTCCCCCTGTGGTTTTCAGTGTATTTAGTCGAGACCTCTCTGCTGAGCTTGCAACCTGTTTA $\verb|TTCACATGGCCTGCCATGCCACTTGGAGGTTTCTGATTACTCCCAAACCTGCTGGTTCTTTATGTCTTTCTCAGC| \\$ GAATAATTCCATCTGTTCATGTTGGAAACTTAGGTGATATGCTCATCTCCTTTTGCCTGTTTATGGAGGTCACCA GCCTCTATCATTTGTATGATTTCGTTTACACTGTTTATATCTCTCTGTCCCCCCTTTTTCTGCCATTGGCATGGT

666/2825 FIGURE **593B**

TTAGACCTGTACTCTTTATCAGCAGAGGTACTGTAATATTTTGTGATCCCTCAGCTTCCAGGCTTACTCCTGGT CTCTGCCTTCCTATCTACATATCCTTTTAAAATAAAATTTTAACTATCTCCTGAAAAATTGTTGAGTAGGTCACG CACAATCAGGAGAAAAATCTATTCATGACATACAAGTCTCTGTCTAATCTGAACACTGCACCTGTCTCTGGCCTT TGAAAATTGAGAAGCGCTATCCTTTCTCTTTGGGCATTATTAGGAGGCTCACAGACAAGTCCAGGAGTCTGGTTA TACCCTCCTGTGCCATTCAACCAGGTGGCTTTCCCATGACTGTGATGAATAAATTGAGAAGCCCCTGCCCTTTT CTAGGTCCTGGGTCTTCATCTGTTTGGCTCTGCTACTGTTTCCTCCTCCCAGGAAGTGTGGTTAGACAAATAATG TGTTTTAATTACCTGTCACACTCAGGATTAATACATACTCAGGTTAACTGTAGAGAGGCATTGGCTTCAGAACAC TCCTCGTGACAATTTTAACCATTTTCTTTGTCTAGAGTCTGCCTTTTTCTTTTTACAATTTCTTTTATTTCAAC TTGAGACCACCTTAGATTCATATGGACAAGGACAAGGTATTTTGCATTTGCTTACTGGAATTCAGTTTTCC CAGTATGATGGCCAGTCAGTCTTTCCATCCCTGTGCCTACATGCTGCTCTTCCCGTCCACAAGTGGAGTCTGTTT CTCTTGAGTTTTGGCTGGCCTTATGAATGGCTTTGCTTACTGAAGTGCAGCAGAAGAAATTTAGTATATGTCCAA GCCTAGGCTTTAAGAGACTGGCAGCTTTCCTTTTATCCTTTTTGGAAGCTAGCCACCATGCTGCAAAGAAGCTCA GCTGGATTACTGAAAGATGAGAGGCCATGTGGAGAGAGACTCTTGAGGATGAGAGATTATCTTGGATGTTCCAGC CTTAAGCTCCCAGCTGAATGTGGGTGTATCCTCAGCTACACCACAGAAAACAGAGGAACTACTCAGTCGATCCCA ATCAACCCACAGACTCACTAGAAATAACAAATTATTGTTTTAAGCCACGAGGTTTTGGGGGGAGGGTTGTTAAACA GTAATAGATAAGTGAGACAGATTGCTTGTTATTTATGGTCAAATGGTGATTATCTCTGGTGAGATTACAGGTGAT GTTTTTTTTAAGTTATGCCTATCTGTAGTTTCCTTTTTTTCCTAAAATTGATTTGAATTATTAGTGTATTAACAG AATAAAGAATGAACTTTAAAACACACACGCTGGTTATATGCTTCCTCTAATTAAAATTCATGGCTCTCACCAC

667/2825 FIGURE **594**

CGGGLVFRGRRCAAAEGGRAGSGMELGRPLLEVLASALSPASPPLLPPDYILCVVSLLQMKDLGAEHLAGHEGVQ LLGLLNVYLEQEERFQPREKGLSLIEATPENDNTLCPGLRNAKVEDLRSLANFFGSCTETFVLAVNILDRFLALM KVKPKHLSCIGVCSFLLAARIVEEDCNIPSTHDVIRISQCKCTASDIKRMEKIISEKLHYELEATTALNFLHLYH TIILCHTSERKEILSLDKLEAQLKACNCRLIFSKAKPSVLALCLLNLEVETLKSVELLEILLLVKKHSKINDTEF FYWRELVSKCLAEYSSPECCKPDLKKLVWIVSRRTAQNLHNSYYSVPELPTIPEGGCFDESESEDSCEDMSCGEE SLSSSPPSDQECTFFFNFKVAQTLCFPS

668/2825 FIGURE **595**

CCGGTCGGATGCCGGACCGGGGGCACCGCTGAGGCGGTGGGTCCCCGACCTGCGAGACAGGTTTGGAAGCCCCCG GCAGAGCACTTGGCAGGTCATGAAGGGGTCCAACTTCTCGGGTTGTTGAACGTCTACCTGGAACAAGAAGAGAGA TTCCAACCTCGAGAAAAAGGGCTGAGTTTGATTGAGGCTACCCCGGAGAATGATAACACTTTGTGTCCAGGATTG AGAAATGCCAAAGTTGAAGATTTAAGGAGTTTAGCCAACTTTTTTGGATCTTGCACTGAAACTTTTGTCCTGGCT GTCAATATTTTGGACAGGTTCTTGGCTCTTATGAAGGTGAAACCTAAACATTTGTCTTGCATTGGAGTCTGTTCT TGTAAATGTACTGCTTCTGACATAAAACGGATGGAAAAAATAATTTCAGAAAAATTGCACTATGAATTGGAAGCT AGCCTTGATAAACTAGAAGCTCAGCTGAAAGCTTGCAACTGCCGACTCATCTTTTCAAAAGCAAAACCATCTGTA TTAGCCTTGTGCCTTCTCAATTTGGAAGTGGAAACTTTGAAATCTGTTGAATTACTGGAAATTCTCTTGCTAGTT AAAAAACATTCCAAGATTAATGACACTGAGTTCTTCTACTGGAGAGAGTTGGTTTCTAAATGCCTAGCCGAGTAT TCTTCTCCTGAATGTTGCAAACCAGATCTTAAGAAGTTGGTTTGGATCGTTTCAAGGCGCACAGCCCAGAACCTC CACAACAGCTACTATAGTGTTCCTGAGCTGCCAACGATACCTGAGGGGGGGTTGTTTTGATGAAAGTGAAAGTGAG GACTCTTGTGAAGATATGAGTTGTGGAGAGGAGAGTCTCAGCAGCTCTCCCCAGTGATCAAGAGTGCACCTTC $\tt TTTTTCAACTTCAAAGTGGCACAAACACTGTGCTTTCCATCT\underline{\textbf{TAG}} \texttt{AAATCTGATTGTTCTGTCAGAATTTATATT$ TACAGGGTTTCAAAGCAATAAATGGGGGAATAGGTAGTTTCCTGGTTTAGCCCCCATCTAGTCAGGAATTAATAT GGGGTAGTGCCTCTTAAACCATTAACAGTACTTTAGACATTGGCACTTTATTTTTCTCGTAGATCTTTAGCTACT TTGGGGAGGGGAGGTGCTGATACCTTCAATTTGTTACTTTCAAGATTTTTAAAAATAACTAGTGTAGCTTA TCTTAAACATTTTATAAAACCTTCAGATGTCTTTAAGCAGATTGGAAGTATGCAAGTGCTTCCTTAGCAGGGACA CAAACACATTTTTGTTGTTTTTTTAAATGATCAGTGTCTATTTGATGTGATGCAGATCTTATAAATTTTGGG AATTATAATATTGACATTTCTGTGATTTTTATATATGTAATGTCTTAATTGAGATTTTGTGTTAAGGCAGAAATAA ${\tt TTAGGCTAGGGCTCTTAGTTTCCTATTGCCCCAAGTATTGTCAAACTATGGTATTATTTTAATGTTACTT}$ TAAAAATCCATAATCTGCTAGTTTTGCATGTACTTATATGAAAACAGTGCAGTAAGTTGAAAACTCAGTATCTAT GGAATTGATAAATGTTGATCTGGTGTAGTATATTTTATCCGCATTTTCTTATATTAAAAAAATGTTCTGCATGATT ACATTTTATTTGCCTTTGT

669/2825 FIGURE **596**

MKDLGAEHLAGHEGVQLLGLLNVYLEQEERFQPREKGLSLIEATPENDNTLCPGLRNAKVEDLRSLANFFGSCTE TFVLAVNILDRFLALMKVKPKHLSCIGVCSFLLAARIVEEDCNIPSTHDVIRISQCKCTASDIKRMEKIISEKLH YELEATTALNFLHLYHTIILCHTSERKEILSLDKLEAQLKACNCRLIFSKAKPSVLALCLLNLEVETLKSVELLE ILLLVKKHSKINDTEFFYWRELVSKCLAEYSSPECCKPDLKKLVWIVSRRTAQNLHNSYYSVPELPTIPEGGCFD ESESEDSCEDMSCGEESLSSSPPSDQECTFFFNFKVAQTLCFPS

670/2825 FIGURE **597A**

GCGGATTGTTGCTCCGTTGTACCTGCTGGGGAATTCACCTCGTTACTGCTTGATATCTTCCACCCCTTACAAAAT CAGAAAAGTTGTGTTTTCTAATACCAAAGAGGGGGTTTGGCTTTCTGTGGGTGATTCCCAGACACTGAAGTGCAA AGAAGAGCCCTCCTAGAAAAGTAAAAT**ATG**ACTAAAAGCAATGGAGAAGAGCCCAAGATGGGGGGCAGGATGGA GAGATTCCAGCAGGGAGTCCGTAAACGCACACTTTTGGCCAAGAAGAAAGTGCAGAACATTACAAAGGAGGATGT TAAAAGTTACCTGTTTCGGAATGCTTTTGTGCTGCTCACAGTCACCGCTGTCATTGTGGGTACAATCCTTGGATT TACCCTCCGACCATACAGAATGAGCTACCGGGAAGTCAAGTACTTCTCCTTTCCTGGGGAACTTCTGATGAGGAT GTTACAGATGCTGGTCTTACCACTTATCATCTCCAGTCTTGTCACAGGAATGGCGGCGCTAGATAGTAAGGCATC AGGGAAGATGGGAATGCGAGCTGTAGTCTATTATATGACTACCACCATCATTGCTGTGGTGATTGGCATAATCAT TGTCATCATCATCCTGGGAAGGGCACAAAGGAAAACATGCACAGAGAGGCAAAATTGTACGAGTGACAGC TGCAGATGCCTTCCTGGACTTGATCAGGAACATGTTCCCTCCAAATCTGGTAGAAGCCTGCTTTAAACAGTTTAA AACCAACTATGAGAAGAGAAGCTTTAAAGTGCCCATCCAGGCCAACGAAACGCTTGTGGGTGCTGTGATAAACAA TGTGTCTGAGGCCATGGAGACTCTTACCCGAATCACAGAGGAGCTGGTCCCAGGTTCCAGGATCTGTGAATGGAGT CAATGCCCTGGGTCTAGTTGTCTTCTCCATGTGCTTCGGTTTTGTGATTGGAAACATGAAGGAACAGGGGCAGGC CCTGAGAGAGTTCTTTGATTCTCTTAACGAAGCCATCATGAGACTGGTAGCAGTAATAATGTGGTATGCCCCCGT GGGTATTCTCTTCCTGATTGCTGGGAAGATTGTGGAGATGGAAGACATGGGTGTGATTGGGGGGCAGCTTGCCAT GTACACCGTGACTGTCATTGTTGGCTTACTCATTCACGCAGTCATCGTCTTGCCACTCCTCTACTTCTTGGTAAC ACGGAAAAACCCTTGGGTTTTTATTGGAGGGTTGCTGCAAGCACTCATCACCGCTCTGGGGACCTCTTCAAGTTC TGCCACCCTACCCATCACCTTCAAGTGCCTGGAAGAGAACAATGGCGTGGACAAGCGCGTCACCAGATTCGTGCT $\tt CCCCGTAGGAGCCACCATTAACATGGATGGGACTGCCCTCTATGAGGCTTTGGCTGCCATTTTCATTGCTCAAGT$ TAACAACTTTGAACTGAACTTCGGACAAATTATTACAATCAGCATCACAGCCACAGCTGCCAGTATTGGGGCAGC TGGAATTCCTCAGGCGGGCCTGGTCACTATGGTCATTGTGCTGACATCTGTCGGCCTGCCCACTGACGACATCAC GCTCATCATCGCGGTGGACTGGTTCCTGGATCGCCTCCGGACCACCACCAACGTACTGGGAGACTCCCTGGGAGC TGGGATTGTGGAGCACTTGTCACGACATGAACTGAAGAACAGAGATGTTGAAATGGGTAACTCAGTGATTGAAGA GAATGAAATGAAGAAACCATATCAACTGATTGCACAGGACAATGAAACTGAGAAACCCATCGACAGTGAAACCAA GATG<u>TAG</u>ACTAACATAAAGAAACACTTTCTTGAGCACCAGGTGTTAAAAAACCATTATAAAATCTTTCCATCTCAT TACAGCTCATTCGCTCCAGCAAGCCCGTCATCTTCCCTTTCCTCCCTTCTGATAAGACTGGAAAATAGTCCTCCA GTTAGTCTTACCGAATAAGGTACCAAGATCACAAATAGTGTTGATCAGATCTTACAAGTTTATGTGGCACACAAT TCCTATAAATGTGATTTTTTTATATAAGTTAAAGAGACAAATAGTAGGCTAAAAACATTTTAAAATCAACTTTTG AAATTTAAAAATCTTTCAGAATACAATTCAGTTTTAGTTTCAAAATGTTAACAACTTGAATTACAACCGGTTATC AGTTGGACAGTAAGATTTTATCCCTTTCTCTTCTGACTGGTATACCTATTTCATTAGTAGCTAGGTGCACATATA CATCTAGCACAGCTGTGAGGACAGACAGAAGGCAAAGTTTCCATGTGGCCTTGAGCAAGTCCCATCTCACCTCTA GGCCTCAGTGTCCTCATCTATAAAATGAGGGACTTCCCTAGAAGTCTTCATGGTCTCTTCCAGCCCAGACATCCT TGAGCAAAGTGCAGGTTATGCAAGTCGCCAGGCAGGAGGCCATTCCAGGAGTGGGATTATTCATCAAACTCTTTG $\tt CCCAGTTCATCCCAATGGGGGAAGTATTCCCTTCTTTCCTACTCTGGGAAGAATGTCTCCTGCCACTCCTCAACT$ GATGATAGACTTCGAAAACAGATGAGAAGACTAGCAGCTAGCAAGGGTGCTTGTAGTCACACTGTGGAACACTAA AATCATTCCCCCGTGAAGTCTGCTTACCAAAACATAAGACGACTTATATATTTTGAAAGAAGTCAAATGAG CTCTCTAATAGAAGTCCATGAGTTGAGTGGGTATTTCTTATTTGAAAGTGTTTTTCTTTAATCAAAAGTCCTTAG AATGAGGGAAACAAATATTTATTTGTTTTTGGAATCCCACTTATCAAAATCATTCAAAACTTTCAGCTGGAGTGGG GTTTGCTTTTGTTTTGTTTCATAAGAGAAATGGTAGAAGATGAATCAGTATGAAGACACTGTCAATGAGG TTATGAGAAAAAACAGCAGGGGCATTAGTTTCAGGCAAGGCAGCTCCCAGGTTTAGAGATTAATTTTTACCCCC TAAGGAATATCCAGTCAAAGACGCTGAGTGGGAGCTGTCAGGCAGTAGCAGCTGTGTTTGAGTTTCTGGCTGAAA ATGGTGAAGAATGGACTTAATTATGCTAACAAACTGAAAAATCTAGACATAGATCCTCTGATATACAATTAGAGA TATTTTTATATAGACCCCAAGCATTCTGTGCATAAAAGTTAACATTAGGCTGTGGTGCAGTAACCATTTAATGTC

671/2825 FIGURE **597B**

GAGGCTCTATTTCGGAAATACACTACAAATGTTAAAGTACGTGGCTGTCCTCTTAAGACACTAGTAGAGCAAAGA CTTAATCATATCAACTTAATTCTGTTACACAATATGTGTTTTTTAATATACTAACCATTTCTTATGGAAAGGTCC TGTGGGGAGCCCATCCTCTCGCCAAGCCATCACAGGCTCTGCATACACATGCACTCAGTGTGGACTGGGAAGCAT TACTTTGTAGATGTATTTTCAATAAAGAAAAAAATAGTTTTACATT

672/2825 **FIGURE 598**

MTKSNGEEPKMGGRMERFQQGVRKRTLLAKKKVQNITKEDVKSYLFRNAFVLLTVTAVIVGTILGFTLRPYRMSY REVKYFSFPGELLMRMLQMLVLPLIISSLVTGMAALDSKASGKMGMRAVVYYMTTTIIAVVIGIIIVIIIHPGKG TKENMHREGKIVRVTAADAFLDLIRNMFPPNLVEACFKQFKTNYEKRSFKVPIQANETLVGAVINNVSEAMETLT RITEELVPVPGSVNGVNALGLVVFSMCFGFVIGNMKEQGQALREFFDSLNEAIMRLVAVIMWYAPVGILFLIAGK IVEMEDMGVIGGQLAMYTVTVIVGLLIHAVIVLPLLYFLVTRKNPWVFIGGLLQALITALGTSSSSATLPITFKC LEENNGVDKRVTRFVLPVGATINMDGTALYEALAAIFIAQVNNFELNFGQIITISITATAASIGAAGIPQAGLVT MVIVLTSVGLPTDDITLIIAVDWFLDRLRTTTNVLGDSLGAGIVEHLSRHELKNRDVEMGNSVIEENEMKKPYQL IAQDNETEKPIDSETKM

673/2825 FIGURE **599A**

CCCGATCACCCGCCGGCGGGCCGCCGCCGCCGCCACCGGCATCGCGCGCCTCCGGGGCTTCTGCAGCGCCGA TGGCTCCGACCCGCTCTGGGACTGGAATGTCACGTGGAATACCAGCAACCCCGACTTCACCAAGTGCTTTCAGAA CACGGTCCTCGTGTGGGCCTTGTTTTTACCTCTGGGCCTGTTTCCCCTTCTACTTCCTCTATCTCTCCCGACA TGACCGAGGCTACATTCAGATGACACCTCTCAACAAAACCAAAACTGCCTTGGGATTTTTGCTGTGGATCGTCTG CTGGGCAGACCTCTTCTACTCTTTCTGGGAAAGAAGTCGGGGCATATTCCTGGCCCCAGTGTTTCTGGTCAGCCC AGGGATCATGCTCACTTTCTGGCTGGTAGCCCTAGTGTGTGCCCTAGCCATCCTGAGATCCAAAATTATGACAGC CTTAAAAGAGGATGCCCAGGTGGACCTGTTTCGTGACATCACTTTCTACGTCTACTTTTCCCTCTTACTCATTCA GCTCGTCTTGTCCTGTTTCTCAGATCGCTCACCCCTGTTCTCGGAAACCATCCACGACCCTAATCCCTGCCCAGA GTCCAGCGCTTCCTTCCTGTCGAGGATCACCTTCTGGTGGATCACAGGGTTGATTGTCCGGGGGCTACCGCCAGCC CCTGGAGGGCAGTGACCTCTGGTCCTTAAACAAGGAGGACACGTCGGAACAAGTCGTGCCTGTTTTGGTAAAGAA CTGGAAGAAGGAATGCGCCAAGACTAGGAAGCAGCCGGTGAAGGTTGTGTACTCCTCCAAGGATCCTGCCCAGCC GAAAGAGTTCCAAGGTGGATGCGAATGAGGAGGTGGAGGCTTTGATCGTCAAGTCCCCACAGAAGGAGTGGAA CCCCTCTCTGTTTAAGGTGTTATACAAGACCTTTGGGCCCTACTTCCTCATGAGCTTCTTCTCAAGGCCATCCA $\verb|CCACATCTGCTTCGTCAGTGGCATGAGGATCAAGACCGCTGTCATTGGGGGCTGTCTATCGGAAGGCCCTGGTGAT|\\$ GGACTTGGCCACGTACATTAACATGATCTGGTCAGCCCCCCTGCAAGTCATCCTTGCTCTCTACCTCCTGTGGCT GAATCTGGGCCCTTCCGTCCTGGCTGGAGTGGCGGTGATGGTCCTCATGGTGCCCGTCAATGCTGTGATGGCGAT GAAGACCAAGACGTATCAGGTGGCCCACATGAAGAGCAAAGACAATCGGATCAAGCTGATGAACGAAATTCTCAA GCTGAAGGTGCTGAAGAAGTCTGCCTACCTGTCAGCCGTGGGCACCTTCACCTGGGTCTGCACGCCCTTTCTGGC GAGTGTCTCCCTCAAACGCCTGAGGATCTTTCTCTCCCATGAGGAGCTGGAACCTGACAGCATCGAGCGACGGCC ${\tt TGTCAAAGACGGCGGGGGCACGAACAGCATCACCGTGAGGAATGCCACATTCACCTGGGCCAGGAGCGACCCTCC}$ GTCGTCCTGCTCTCAGCCCTCTTGGCTGAGATGGACAAAGTGGAGGGGCACGTGGCTATCAAGGGCTCCGTGGC CTATGTGCCACAGCAGGCCTGGATTCAGAATGATTCTCTCCGAGAAAACATCCTTTTTGGATGTCAGCTGGAGGA ACCATATTACAGGTCCGTGATACAGGCCTGTGCCCTCCCCAGACCTGGAAATCCTGCCCAGTGGGGATCGGAC AGAGATTGGCGAGAAGGGCGTGAACCTGTCTGGGGGCCCAGAAGCAGCGCGTGAGCCTGGCCCGGGCCGTGTACTC CAACGCTGACATTTACCTCTTCGATGATCCCCTCTCAGCAGTGGATGCCCATGTGGGAAAACACATCTTTGAAAA TGTGATTGGCCCCAAGGGGATGCTGAAGAACAAGACGCGGATCTTGGTCACGCACAGCATGAGCTACTTGCCGCA GGTGGACGTCATCATCGTCATGAGTGGCGGCAAGATCTCTGAGATGGGCTCCTACCAGGAGCTGCTGGCTCGAGA CGGCGCCTTCGCTGAGTTCCTGCGTACCTATGCCAGCACAGAGCAGGAGCAGGATGCAGAGGAGAACGGGGTCAC GGGCGTCAGCGGTCCAGGGAAGGAAGCAAATGGAGAATGGCATGCTGGTGACGGACAGTGCAGGGAAGCA ACTGCAGAGACAGCTCAGCAGCTCCTCCTCTATAGTGGGGACATCAGCAGGCACCACAACAGCACCGCAGAACT GCAGAAAGCTGAGGCCAAGAAGGAGGAGACCTGGAAGCTGATGGAGGCTGACAAGGCCGCAGACAGGGCAGGTCAA TAACCATGTGTCCGCGCTGGCTTCCAACTATTGGCTCAGCCTCTGGACTGATGACCCCATCGTCAACGGGACTCA GGAGCACACGAAAGTCCGGCTGAGCGTCTATGGAGCCCTGGGCATTTCACAAGGGATCGCCGTGTTTGGCTACTC ACCCATGAGCTTCTTTGAGCGGACCCCCAGTGGGAACCTGGTGAACCGCTTCTCCAAGGAGCTGGACACAGTGGA CTCCATGATCCCGGAGGTCATCAAGATGTTCATGGGCTCCCTGTTCAACGTCATTGGTGCCTGCATCGTTATCCT GCTGGCCACGCCCATCGCCGCCATCATCATCCCGCCCCTTGGCCTCATCTACTTCTTCGTCCAGAGGTTCTACGT GGCTTCCTCCCGGCAGCTGAAGCGCCTCGAGTCGGTCAGCCGCTCCCCGGTCTATTCCCATTTCAACGAGACCTT GCTGGGGGTCAGCGTCATTCGAGCCTTCGAGGAGCAGGAGCGCTTCATCCACCAGAGTGACCTGAAGGTGGACGA

674/2825 FIGURE **599B**

 ${\tt CATCGTTCTGTTTGCTGCCCTGTTTGCGGTGATCTCCAGGCACAGCCTCAGTGCTGGCTTGGTGGGCCTCTCAGT}$ GGCCGTGGAGAGGCTCAAGGAGTATTCAGAGACTGAGAAGGAGGCGCCCTGGCAAATCCAGGAGACAGCTCCGCC TCTCAGGCACATCAATGTCACGATCAATGGGGGGAGAAAAGGTCGGCATCGTGGGGCGGACGGGAGCTGGGAAGTC GTCCCTGACCCTGGGCTTATTTCGGATCAACGAGTCTGCCGAAGGAGAGATCATCATCGATGGCATCAACATCGC CAAGATCGGCCTGCACGACCTCCGCTTCAAGATCACCATCATCCCCCAGGACCCTGTTTTTGTTTTCGGGTTCCCT CCGAATGAACCTGGACCCATTCAGCCAGTACTCGGATGAAGAAGTCTGGACGTCCCTGGAGCTGGCCCACCTGAA GGACTTCGTGTCAGCCCTTCCTGACAAGCTAGACCATGAATGTGCAGAAGGCGGGGGAAACCTCAGTGTCGGGCA GCGCCAGCTTGTGTGCCTAGCCCGGGCCCTGCTGAGGAAGACGAAGATCCTTGTGTTGGATGAGGCCACGGCAGC CGTGGACCTGGAAACGGACGACCTCATCCAGTCCACCATCCGGACACAGTTCGAGGACTGCACCGTCCTCACCAT CGCCCACCGGCTCAACACCATCATGGACTACACAAGGGTGATCGTCTTGGACAAAGGAGAAATCCAGGAGTACGG $\tt CGCCCCATCGGACCTCCTGCAGCAGAGAGGTCTTTTCTACAGCATGGCCAAAGACGCCGGCTTGGTG{\underline{TGA}}{GCCCC}$ AGAGCTGGCATATCTGGTCAGAACTGCAGGGCCTATATGCCAGCGCCCAGGGAGGAGTCAGTACCCCTGGTAAAC CAAGCCTCCCACACTGAAACCAAAACATAAAAACCAAACCCAGACAAACCAAAACATATTCAAAGCAGCCACC GCCATCCGGTCCCTGCATGGAACTGGCTGTGAAGACCCAGGAGAGACAGAGATGCGAACCACCCAAAACACGCA CACCCTGCCCCTGGTGCCCTGAGACAGACACACACCCCCCAGGAATGCAAGTGGTTTCCTGGTGCTTC CCACGGAGGAGTTTTGGCAGCCAGACTTCTGGAGGAATTGGTTGTATAGAAGATCCTAGTGACCAAATTCAGCCT ACTGCCTCGGATCTCTCCAGCCGAAGTCTGTGGACTGCAAGTCTTTGAGATGCTTCTGGCTCCCATCACCTCTAA CATCCTTGTCTGGGTCTACCAGGAACGCTTCATTTCCTTGGGGCTGCAGTTTTGTGGTTGAGGGGCCTGGAGAAA ATCATTTCTCCCCTTGGCAGTGTCCCAGGGCCCTGGATGGTCCTCTTACCAACATCTGGTCTTCCAGGCACTCA AAAGCTGGGAACCAGCATCTCAGCGCCAGCTCTACCAGTTCTCGTTTTTGGGCCAGAGGCAGCCTCTGCACTCCCA CGCCTGTCCTCCTGGAAGGGACCTGGTTGGACTAACGGCTAACCTGGACCTGGAACTGTAGGGCCAGGGGATTGT GCCTCATGGGAATTTGACCTTGACTAGAAATAGAGACTGAGAGTGAGCAACCAGCTGGAAGGTACTATGCCAGTC TTTCTTACCACCTCTTTTCCTTCATGGTACCTGCTCATGGTTATGAAGCTTTCAAAGTAAAGAACACGA AATAC

675/2825 FIGURE 600

MALRGFCSADGSDPLWDWNVTWNTSNPDFTKCFQNTVLVWVPCFYLWACFPFYFLYLSRHDRGYIQMTPLNKTKT $\verb|ALGFLLWIVCWADLFYSFWERSRGIFLAPVFLVSPTLLGITTLLATFLIQLERRKGVQSSGIMLTFWLVALVCAL| \\$ AILRSKIMTALKEDAQVDLFRDITFYVYFSLLLIQLVLSCFSDRSPLFSETIHDPNPCPESSASFLSRITFWWIT GLIVRGYRQPLEGSDLWSLNKEDTSEQVVPVLVKNWKKECAKTRKQPVKVVYSSKDPAQPKESSKVDANEEVEAL ${\tt IVKSPQKEWNPSLFKVLYKTFGPYFLMSFFFKAIHDLMMFSGPQILKLLIKFVNDTKAPDWQGYFYTVLLFVTAC}$ LQTLVLHQYFHICFVSGMRIKTAVIGAVYRKALVITNSARKSSTVGEIVNLMSVDAORFMDLATYINMIWSAPLO VILALYLLWLNLGPSVLAGVAVMVLMVPVNAVMAMKTKTYQVAHMKSKDNRIKLMNEILNGIKVLKLYAWELAFK DKVLAIRQEELKVLKKSAYLSAVGTFTWVCTPFLASVSLKRLRIFLSHEELEPDSIERRPVKDGGGTNSITVRNA TFTWARSDPPTLNGITFSIPEGALVAVVGQVGCGKSSLLSALLAEMDKVEGHVAIKGSVAYVPQQAWIONDSLRE NILFGCQLEEPYYRSVIQACALLPDLEILPSGDRTEIGEKGVNLSGGQKQRVSLARAVYSNADIYLFDDPLSAVD AHVGKHIFENVIGPKGMLKNKTRILVTHSMSYLPQVDVIIVMSGGKISEMGSYQELLARDGAFAEFLRTYASTEQ EQDAEENGVTGVSGPGKEAKQMENGMLVTDSAGKQLQRQLSSSSSYSGDISRHHNSTAELOKAEAKKEETWKLME ADKAQTGQVKLSVYWDYMKAIGLFISFLSIFLFMCNHVSALASNYWLSLWTDDPIVNGTQEHTKVRLSVYGALGI SQGIAVFGYSMAVSIGGILASRCLHVDLLHSILRSPMSFFERTPSGNLVNRFSKELDTVDSMIPEVIKMFMGSLF NVIGACIVILLATPIAAIIIPPLGLIYFFVQRFYVASSRQLKRLESVSRSPVYSHFNETLLGVSVIRAFEEQERF $\verb|IHQSDLKVDENQKAYYPSIVANRWLAVRLECVGNCIVLFAALFAVISRHSLSAGLVGLSVSYSLQVTTYLNWLVR|$ MSSEMETNIVAVERLKEYSETEKEAPWQIQETAPPSSWPQVGRVEFRNYCLRYREDLDFVLRHINVTINGGEKVG IVGRTGAGKSSLTLGLFRINESAEGEIIIDGINIAKIGLHDLRFKITIIPQDPVLFSGSLRMNLDPFSQYSDEEV WTSLELAHLKDFVSALPDKLDHECAEGGENLSVGQRQLVCLARALLRKTKILVLDEATAAVDLETDDLIQSTIRT QFEDCTVLTIAHRLNTIMDYTRVIVLDKGEIQEYGAPSDLLQQRGLFYSMAKDAGLV

676/2825 FIGURE 601

677/2825 FIGURE 602

 ${\tt MDGEEKTYGGCEGPDAMYVKLISSDGHEFIVKREHALTSGTIKAMLSGPGQFAENETNEVNFREIPSHVLSKVCM} \\ {\tt YFTYKVRYTNSSTEIPEFPIAPEIALELLMAANFLDC}$

678/2825 FIGURE 603

CAGACCCCAGTTCGCCGACTAAGCAGAAGAAGATCAAAAACCGGAAAAGAGGGAGAAGAGCAAACAGGCACTTTG AGGAACAATCCCCTTTAACTCCAAGCCGACAGCGGTCTAGGAATTCAAGTTCAGTGCCTACCGAAGACAAAGGCG CCCCGAGGGAGTGCCGACCCCAGGGCGTGGGCCCGCCGCCGACCCACACTGCCCGGCTGACCCGGTGG TCTCGGACC<u>ATG</u>TCTCCCGCCCCAAGACCCCCCGTTGTCTCCTGCTCCCCCTGCTCACGCTCGGCACCGCGCTC GCCTCCCTCGGCTCGGCCCAAAGCAGCTTCAGCCCCGAAGCCTGGCTACAGCAATATGGCTACCTGCCTCCC GGGGACCTACGTACCCACACACAGCGCTCACCCCAGTCACTCTCAGCGGCCATCGCTGCCATGCAGAAGTTTTAC GGCTTGCAAGTAACAGGCAAAGCTGATGCAGACACCATGAAGGCCATGAGGCGCCCCCGATGTGGTGTTCCAGAC AAGTTTGGGGCTGAGATCAAGGCCAATGTTCGAAGGAAGCGCTACGCCATCCAGGGTCTCAAATGGCAACATAAT GAAATCACTTTCTGCATCCAGAATTACACCCCCAAGGTGGGCGAGTATGCCACATACGAGGCCATTCGCAAGGCG TTCCGCGTGTGGGAGAGTGCCACACCACTGCGCTTCCGCGAGGTGCCCTATGCCTACATCCGTGAGGGCCATGAG AAGCAGGCCGACATCATGATCTTCTTTGCCGAGGGCTTCCATGGCGACAGCACGCCCTTCGATGGTGAGGGCGGC TTCCTGGCCCATGCCTACTTCCCAGGCCCCAACATTGGAGGAGACACCCACTTTGACTCTGCCGAGCCTTGGACT GTCAGGAATGAGGATCTGAATGGAAATGACATCTTCCTGGTGGCTGTGCACGAGCTGGGCCATGCCCTGGGGCTC GATGATGACCGCCGGGGCATCCAGCAACTTTATGGGGGTGAGTCAGGGTTCCCCACCAAGATGCCCCCTCAACCC AGGACTACCTCCCGGCCTTCTGTTCCTGATAAACCCAAAAACCCCACCTATGGGCCCAACATCTGTGACGGGAAC TTTGACACCGTGGCCATGCTCCGAGGGGAGATGTTTGTCTTCAAGGAGCGCTGGTTCTGGCGGGTGAGGAATAAC GAGAGGAAGGATGGCAAATTCGTCTTCTTCAAAGGAGACAAGCATTGGGTGTTTGATGAGGCGTCCCTGGAACCT GGCTACCCCAAGCACATTAAGGAGCTGGGCCGAGGGCTGCCTACCGACAAGATTGATGCTGCTCTTCTGGATG CCCAATGGAAAGACCTACTTCTTCCGTGGAAACAAGTACTACCGTTTCAACGAAGAGCTCAGGGCAGTGGATAGC GTCTTCACTTACTTCTACAAGGGGAACAAATACTGGAAATTCAACAACCAGAAGCTGAAGGTAGAACCGGGCTAC CTGCTGCTCCTGGTGCTGGCGGTGGGCCTTGCAGTCTTCTTCTTCAGACGCCATGGGACCCCCAGGCGACTGCTC ${\tt TACTGCCAGCGTTCCCTGCTGGACAAGGTC\underline{TGA}CGCCCACCGCCGGCCCACTCCTACCACAAGGACTTTGC}$ CTCTGAAGGCCAGTGGCAGCAGGTGGTGGGTGGGTGGCTCCCATCGTCCCGAGCCCCCTCCCCGCAGCCTCC CCCTAGATAGGTCCCCTGAGGGCTGAGTGGGAGGGCGGCCCTTTCCAGCCTCTGCCCCTCAGGGGAACCCTGTAG CTTTGTGTCTGCAGCCCCATCTGAATGTGTTGGGGGCTCTGCACTTGAAGGCAGGACCCTCAGACCTCGCTGG TAAAGGTCAAATGGGGTCATCTGCTCCTTTTCCATCCCCTGACATACCTTAACCTCTGAACTCTGACCTCAGGAG GCTCTGGGCACTCCAGCCCTGAAAGCCCCAGGTGTACCCAATTGGCAGCCTCTCACTACTCTTTCTGGCTAAAAG GAATCTAATCTTGTTGAGGGTAGAGACCCTGAGACAGTGTGAGGGGGGTGGGGGACTGCCAAGCCACCCTAAGACCT CCCCAGGGAACTTCCAAGGAAGGAGGCCTGAGCCACTGGGGGACTAAGTGGGCAGAAGAAACCCTTGGCAGCCCTGT GCCTCTCGAATGTTAGCCTTGGATGGGGCTTTCACAGTTAGAAGAGCTGAAACCAGGGGTGCAGCTGTCAGGTAG AAACTCAGGCAGCTGGGGCTGAGGCCCAAAGGCAGAACAGCCAGAGGGGGCCAGAGGGGGACCAAAAAGGAAAATG AGGACGTGCAGCAGCATTGGAAGGCTGGGGCCGGGCAGGCCAAGCCAAGCAGGGGGCCACAGGGTGGGCT GTGGAGCTCTCAGGAAGGGCCCTGAGGAAGGCACACTTGCTCCTGTTGGTCCCTGTCCTTGCTGCCCAGGCAGCG TGGAGGGGAAGGGTAGGGCAGCCAGAGAAAGGAGCAGAGAAGGCACACAAACGAGGAATGAGGGGCTTCACGAGA GGCCACAGGGCCTGGCCACGCTGTCCCGGCCTGCTCACCATCTCAGTGAGGGGCAGGAGCTGGGGCTCGCT TAGGCTGGGTCCACGCTTCCCTGGTGCCAGCACCCCTCAAGCCTGTCTCACCAGTGGCCTGCCCTCTCGCTCCCC CACCCAGCCCATTGAAGTCTCCTTGGGCCACCAAAGGTGGTGGCCATGGTACCGGGGACTTGGGAGAGTGA GACCCAGTGGAGGGAGCAAGAGGGGATGTCGGGGGGGTGGGGCACGGGGTAGGGGAAATGGGGTGAACGGT TATATGAATTCCAAAAAAAAAAAAAAAAAAAAAA

679/2825 FIGURE 604

MSPAPRPPRCLLLPLTLGTALASLGSAQSSSFSPEAWLQQYGYLPPGDLRTHTQRSPQSLSAAIAAMQKFYGLQ
VTGKADADTMKAMRRPRCGVPDKFGAEIKANVRRKRYAIQGLKWQHNEITFCIQNYTPKVGEYATYEAIRKAFRV
WESATPLRFREVPYAYIREGHEKQADIMIFFAEGFHGDSTPFDGEGGFLAHAYFPGPNIGGDTHFDSAEPWTVRN
EDLNGNDIFLVAVHELGHALGLEHSSDPSAIMAPFYQWMDTENFVLPDDDRRGIQQLYGGESGFPTKMPPQPRTT
SRPSVPDKPKNPTYGPNICDGNFDTVAMLRGEMFVFKERWFWRVRNNQVMDGYPMPIGQFWRGLPASINTAYERK
DGKFVFFKGDKHWVFDEASLEPGYPKHIKELGRGLPTDKIDAALFWMPNGKTYFFRGNKYYRFNEELRAVDSEYP
KNIKVWEGIPESPRGSFMGSDEVFTYFYKGNKYWKFNNQKLKVEPGYPKSALRDWMGCPSGGRPDEGTEEETEVI
IIEVDEEGGGAVSAAAVVLPVLLLLLVLAVGLAVFFFRRHGTPRRLLYCQRSLLDKV

680/2825 FIGURE 605

GCCGAGTCGGTGCGTCGGGCCCAGCCTCCGCGCCGCTACACCCCAGACTGGCCGAGCCTGGATTCTCGGCCGCTG CCGGCCTGGTTCGACGAAGCCAAGTTCGGGGTGTTCATCCACTGGGGCGTGTTCTCGGTGCCCGCCTGGGGCAGC GGCTTCAGCTACGCCGACTTCGGACCGCAGTTCACTGCGCGCTTCTTCCACCCGGAGGAGTGGGCCGACCTCTTC CAGGCCGCGGGCGCCAAGTATGTAGTTTTGACGACAAAGCATCACGAAGGCTTCACAAACTGGCCGAGTCCTGTG GGCTTCAAAACACAGCATTTTGTCAGTGCAAAAACAATGCCAGAGCTGTACGACCTTGTTAACAGCTATAAACCT TACAATGACAGCCCTGTCAAGGATGAGGTGGTAGTAAATGACCGATGGGGTCAGAACTCTTCCTGTCACCATGGA GGATACTATAACTGTGAAGATAAATTCAAGCCACAGAGCTTGCCAGATCACAAGTGGGAGATGTGCACCAGCATT GACAAGTTTTCCTGGGGCTATCGTCGTGACATGGCATTGTCTGATGTTACAGAAGAATCTGAAATCATTTCGGAA $\tt CTGGTTCAGACAGTAAGTTTGGGAGGCAACTATCTTCTGAACATTGGACCAACTAAAGATGGACTGATTGTTCCC$ TGGCGGGTGCAATGGGAAAAGAACAACATCTGTATGGTATACCTCAAAGGGATCGGCTGTTTATGCCATTTTT CTGCACTGGCCAGAAAATGGAGTCTTAAACCTTGAATCCCCCATAACTACCTCAACTACAAAGATAACAATGCTG GGAATTCAAGGAGATCTGAAGTGGTCCACAGATCCAGATAAAGGTCTCTTCATCTCTCTACCCCAGTTGCCACCC GAGGCGCTGCTCACTGTTTTCCTGCTTCAGTTTTTCTCTTATAGTACCATCACTATAATCAACGAACTTCTCTTC TCCACCCAGAGATGGCTTTTCCAACACATTTTAATTAAAGGAACTGAGTACATTACCCTGATGTCTAAATGGACC AAAGATCTGAGATCCATTGTGATTATATCTGTATCAGGTCAGCAGAAGAAGGAACTGAGCAGTTGAACTCTGAGT TCATCAATTCTAATATTTGGAAATTATCTACAATGGAATCTTCCCTCTGTTCTCTGATAACCTACTTGCTTACTC AATGCCTTTAAGCCAAGTCACCCTGTTGCCTATGGGAGGAGGTGGAAGGATTTGGCAAGCTCAACCACATGCTAT TTAGTTAGCATCAGTTGTCACCAACAGTCTTTCTGCAAAGGGCAGGAGGGCTTTGGGGGGAAAGGAAAAGGCTTAC CAGGCTGCTATGGTCAACTCTTCAGAAATTTTCAGAGCAATCTAAAAGCGCCCAAAATTCGCTATGTTTACAGTGA TACTATTAAGAAAATGAATGTGATTCTGCTCTGTCTTTTTAAGTATGATCAAATAAA

681/2825 FIGURE 606

MRSRPAGPALLLLLLFLGAAESVRRAQPPRRYTPDWPSLDSRPLPAWFDEAKFGVFIHWGVFSVPAWGSEWFWWH WQGEGRPQYQRFMRDNYPPGFSYADFGPQFTARFFHPEEWADLFQAAGAKYVVLTTKHHEGFTNWPSPVSWNWNS KDVGPHRDLVGELGTALRKRNIRYGLYHSLLEWFHPLYLLDKKNGFKTQHFVSAKTMPELYDLVNSYKPDLIWSD GEWECPDTYWNSTNFLSWLYNDSPVKDEVVVNDRWGQNSSCHHGGYYNCEDKFKPQSLPDHKWEMCTSIDKFSWG YRRDMALSDVTEESEIISELVQTVSLGGNYLLNIGPTKDGLIVPIFQERLLAVGKWLSINGEAIYASKPWRVQWE KNTTSVWYTSKGSAVYAIFLHWPENGVLNLESPITTSTTKITMLGIQGDLKWSTDPDKGLFISLPQLPPSAVPAE FAWTIKLTGVK

FIGURE 607

TTGTACCGCCCTGGCCTGCGGCTTAACTGGCATGGGCTGAGCCCCTTGGGCTGGCCATCATGCCGTAGCATCCAG ACCCTGCGAGTGCTTAGTGGAGATCTGGGCCAGCTTCCCACTGGCATTCGAGATTTTGTAGAGCACAGTGCCCGC CTGTGCCAACCAGAGGGCATCCACATCTGTGATGGAACTGAGGCTGAGAATACTGCCACACTGACCCTGCTGGAG CGAGTAGAGAGCAAGACGGTGATTGTAACTCCTTCTCAGCGGGACACGGTACCACTCCCGCCTGGTGGGGCCTGT GGCCGCACCATGTATGTGCTTCCATTCAGCATGGGTCCTGTGGGCTCCCCGCTGTCCCGCATCGGGGTGCAGCTC ACTGACTCAGCCTATGTGGTGGCAAGCATGCGTATTATGACCCGACTGGGGACACCTGTGCTTCAGGCCCTGGGA GATGGTGACTTTGTCAAGTGTCTGCACTCCGTGGGCCAGCCCCTGACAGGACAAGGGGAGCCAGTGAGCCAGTGG CCGTGCAACCCAGAGAAAACCCTGATTGGCCACGTGCCCGACCAGCGGGAGATCATCTCCTTCGGCAGCGGCTAT GGTGGCAACTCCCTGCTGGGCAAGAAGTGCTTTGCCCTACGCATCGCCTCTCGGCTGGCCCGGGATGAGGGCTGG CTGGCAGAGCACATGCTGATCCTGGGCATCACCAGCCCTGCAGGGAAGAAGGCGCTATGTGCAGCCGCCTTCCCT AGTGCCTGTGGCAAGACCAACCTGGCTATGATGCGGCCTGCACTGCCAGGCTGGAAAGTGGAGTGTGTGGGGGGAT GATATTGCTTGGATGAGGTTTGACAGTGAAGGTCGACTCCGGGCCATCAACCCTGAGAACGGCTTCTTTGGGGTT GCCCCTGGTACCTCTGCCACCACCCAATCCCAACGCCATGGCTACAATCCAGAGTAACACTATTTTTACCAATGTG GCTGAGACCAGTGATGGTGGCGTGTACTGGGAGGGCATTGACCAGCCTCTTCCACCTGGTGTTACTGTGACCTCC TGGCTGGGCAAACCCTGGAAACCTGGTGACAAGGAGCCCTGTGCACATCCCCAACTCTCGATTTTGTGCCCCGGCT CGCCAGTGCCCCATCATGGACCCAGCCTGGGAGGCCCCAGAGGGTGTCCCCATTGACGCCATCATCTTTGGTGGC CGCAGACCCAAAGGGGTACCCCTGGTATACGAGGCCTTCAACTGGCGTCATGGGGTGTTTGTGGGCAGAGCCATG CGCTCTGAGTCCACTGCTGCAGCAGAACACAAAGGGAAGATCATCATGCACGACCCATTTGCCATGCGGCCCTTT TTTGGCTACAACTTCGGGCACTACCTGGAACACTGGCTGAGCATGGAAGGGCGCAAGGGGGCCCAGCTGCCCCGT ATCTTCCATGTCAACTGGTTCCGGCGTGACGAGGCCAGGCACTTCCTGTGGCCAGGCTTTGGGGAGAATGCTCGG GTGCTAGACTGGATCTGCCGGCGGTTAGAGGGGGAGGACAGTGCCCGAGAGACACCCATTGGGCTGGTGCCAAAG GAACAGGAGGTTCGTGACATTCGGAGCTACCTGACAGAGCAGGTCAACCAGGATCTGCCCAAAGAGGTGTTGGCT GAGCTTGAGGCCCTGGAGAGACGTGTGCACAAAATG**TGA**CCTGAGGCCTAGTCTAGCAAGAGGACATAGCACCCT

683/2825 FIGURE 608

MAALYRPGLRLNWHGLSPLGWPSCRSIQTLRVLSGDLGQLPTGIRDFVEHSARLCQPEGIHICDGTEAENTATLT LLEQQGLIRKLPKYNNCWLARTDPKDVARVESKTVIVTPSQRDTVPLPPGGACGQLGNWMSPADFQRAVDERFPG CMQGRTMYVLPFSMGPVGSPLSRIGVQLTDSAYVVASMRIMTRLGTPVLQALGDGDFVKCLHSVGQPLTGQGEPV SQWPCNPEKTLIGHVPDQREIISFGSGYGGNSLLGKKCFALRIASRLARDEGWLAEHMLILGITSPAGKKALCAA AFPSACGKTNLAMMRPALPGWKVECVGDDIAWMRFDSEGRLRAINPENGFFGVAPGTSATTNPNAMATIQSNTIF TNVAETSDGGVYWEGIDQPLPPGVTVTSWLGKPWKPGDKEPCAHPNSRFCAPARQCPIMDPAWEAPEGVPIDAII FGGRRPKGVPLVYEAFNWRHGVFVGRAMRSESTAAAEHKGKIIMHDPFAMRPFFGYNFGHYLEHWLSMEGRKGAQ LPRIFHVNWFRRDEAGHFLWPGFGENARVLDWICRRLEGEDSARETPIGLVPKEGALDLSGLRAIDTTQLFSLPK DFWEQEVRDIRSYLTEQVNQDLPKEVLAELEALERRVHKM

684/2825 FIGURE 609

TCATCACTGGCTTCTCCTACGCCTTCCCCAAGGCCGTCAGTGTCTTCTTCAAGGAGCTCATACAGGAGTTTGGGA TCGGCTACAGCGACACAGCCTGGATCTCCTCCATCCTGCTGGCCATGCTCTACGGGACAGGTCCGCTCTGCAGTG TGTGCGTGAACCGCTTTGGCTGCCGGCCCGTCATGCTTGTGGGGGGGTCTCTTTGCGTCGCTGGGCATGGTGGCTG $\tt CGTCCTTTTGCCGGAGCATCATCCAGGGTCTACCTCACCACTGGGGTCATCACGGGGTTTGGCATCAACT$ TCCAGCCCTCGCTCATCATGCTGAACCGCTACTTCAGCAAGCGGCCCCCATGGCCAACGGGCTGGCGGCAGCAG GTAGCCCTGTCTTCCTGTGTGCCCTGAGCCCGCTGGGGCAGCTGCTGCAGGACCGCTACGGCTGGCGGGCCGCT TCCTCATCCTGGGCGGCCTGCTGCTCACTGCTGCGTGTGCCCCCATGAGGCCCCTGGTGGTCACGGCCC AGCCGGGCTCGGGGCCGCCGACCCTCCCGGCGCCTAGACCTGAGCGTCTTCCGGGACCGCGCTTTGTGC ACCTGGGCGTGCCCGACACCAAGGCCGCCTTCCTGCTCACCATCCTGGGCTTCATTGACATCTTCGCGCGGCCGG $\verb|CCGCGGGCTTCGTGGCGGGCCTTGGGAAGGTGCGGCCCTACTCCGTCTACCTCTTCAGCTTCTCCATGTTCTTCA|\\$ ACGGCCTCGCGGACCTGGCGGGCTCTACGGCGGCGGACTACGGCGGCCTCGTGGTCTTCTGCATCTTTTGGCA TCTCCTACGGCATGGTGGGGGCCCTGCAGTTCGAGGTGCTCATGGCCATCGTGGGCACCCACAAGTTCTCCAGTG CCATTGGCCTGGTGCTGATGGAGGCGGTGGCCGTGCTCGTCGGGCCCCCTTCGGGAGGCAAACTCCTGGATG CGACCCACGTCTACATGTACGTGTTCATCCTGGCGGGGGCCGAGGTGCTCACCTCCTCCCTGATTTTGCTGCTGG GCAACTTCTTCTGCATTAGGAAGAAGCCCAAAGAGCCACAGCCTGAGGTGGCGGCCGCGGAGGAGGAGAAGCTCC ACAAGCCTCCTGCAGACTCGGGGGTGGACTTGCGGGAGGTGGAGCATTTCCTGAAGGCTGAGCCTGAGAAAAACG GGGAGGTGGTTCACACCCCGGÁAACAAGTGTC<u>TGA</u>GTGGCTGGGCGGGGCCGGCAGGCACAGGGAGGTACAG GCCCAGCGGATCGTCCCCGATCAGTGTTTTGAGGGGGAAGGTGGCGGGGTGGGAACCGTGTCATTCCAGAGTGG ATCTGCGGTGAAGCCAAGCTTACAAGGCATCCTCACCAGGGGCCCCGCCTGCTGCTCCCAGGTGGCCT CCGCAGACAGGCTGGCAGGTGCTGCGTGGGGCCCTCTCCAGCCCGTCCTACCCTGGGCTCACATGGGGCC TGTGCCCACCCCTCTTGAGTGTCTTGGGGACAGCTCTTTCCACCCCTGGAAGATGGAAATAAACCTGCGTGTGGG TGGAGTGTTCTCGTGCCGAATTCAAAAAGCTT

685/2825 FIGURE 610

MGGAVVDEGPTGVKAPDGGWGWAVLFGCFVITGFSYAFPKAVSVFFKELIQEFGIGYSDTAWISSILLAMLYGTG PLCSVCVNRFGCRPVMLVGGLFASLGMVAASFCRSIIQVYLTTGVITGLGLALNFQPSLIMLNRYFSKRRPMANG LAAAGSPVFLCALSPLGQLLQDRYGWRGGFLILGGLLLNCCVCAALMRPLVVTAQPGSGPPRPSRRLLDLSVFRD RGFVLYAVAASVMVLGLFVPPVFVVSYAKDLGVPDTKAAFLLTILGFIDIFARPAAGFVAGLGKVRPYSVYLFSF SMFFNGLADLAGSTAGDYGGLVVFCIFFGISYGMVGALQFEVLMAIVGTHKFSSAIGLVLLMEAVAVLVGPPSGG KLLDATHVYMYVFILAGAEVLTSSLILLLGNFFCIRKKPKEPQPEVAAAEEEKLHKPPADSGVDLREVEHFLKAE PEKNGEVVHTPETSV

686/2825 FIGURE 611

CCGAGGATTCCGACTTCCCCATCCACAACCTGCCCTACGGCGTCTTCTCGACCAGAGGCGACCCAAGACCGAGGA TAGGTGTGGCCATTGGCGACCAGATCCTGGACCTCAGCATCATCAAGCACCTCTTTACTGGTCCTGTCCTCCCA AACACCAGGATGTCTTCAATCAGCCTACACTCAACAGCTTCATGGGCCTGGGTCAGGCTGCCTGGAAGGAGGCGA TCATCTCCCAGGCTTCTGCCACGATGCACCTTCCAGCCACCATAGGAGACTACACAGACTTCTATTCCTCTCGGC AGCATGCTACCAACGTCGGAATCATGTTCAGGGACAAGGAGAATGCGTTGATGCCAAATTGGCTGCACTTACCAG TGGGCTACCATGGCCGTGCCTCCTCTGTCGTGGTGTCTGGCACCCCAATCCGAAGGCCCATGGGACAGATGAAAC GCCCTGGAAACAGATTGGGAGAGCCGATCCCCATTTCCAAGGCCCATGAGCACATTTTTGGAATGGTCCTTATGA ACGACTGGAGTGCACGAGACATTCAGAAGTGGGAGTATGTCCCTCTCGGGCCATTCCTTGGGAAGAGTTTTGGGA $\verb|CCACTGTCTCCCGTGGGTGGTCCCATGGATGCTCTCATGCCCTTTGCTGTGCCCAACCCGAAGCAGGACCCCA|\\$ GGCCCCTGCCGTATCTGTGCCATGACGAGCCCTACACATTTGACATCAACCTCTCTGTTAACCTGAAAGGAGAAG GAATGAGCCAGGCGGCTACCATATGCAAGTCCAATTTTAAGTACATGTACTGGACGATGCTGCAGCAGCTCACTC ACCACTCTGTCAACGGCTGCAACCTGCGGCCGGGGGACCTCCTGGCTTCTGGGACCATCAGCGGGCCGGAGCCAG AAAACTTCGGCTCCATGTTGGAACTGTCGTGGAAGGGAACGAAGCCCATAGACCTGGGGAATGGTCAGACCAGGA AGTTTCTGCTGGACGGGGATGAAGTCATCATAACAGGGTACTGCCAGGGGGATGGTTACCGCATCGGCTTTGGCC ${\tt AGTGTGCTGGAAAAGTGCTGCCTGCTCTCCTGCCATCA} {\tt TGA} {\tt GATGTGCTCTTCTGGAAACAAAGGGCTCA}$ AGCACCCCTTTCAACCCTGTGACTGGGGTCCTCCCTCGGGCTGTAGGCCTGGTCCGCCATTCAGTGACAAATAAA GCCATTGTGCTCTGAGGCCTGC

687/2825 FIGURE 612

MSFIPVAEDSDFPIHNLPYGVFSTRGDPRPRIGVAIGDQILDLSIIKHLFTGPVLSKHQDVFNQPTLNSFMGLGQ
AAWKEARVFLQNLLSVSQARLRDDTELRKCAFISQASATMHLPATIGDYTDFYSSRQHATNVGIMFRDKENALMP
NWLHLPVGYHGRASSVVVSGTPIRRPMGQMKPDDSKPPVYGACKLLDMELEMAFFVGPGNRLGEPIPISKAHEHI
FGMVLMNDWSARDIQKWEYVPLGPFLGKSFGTTVSPWVVPMDALMPFAVPNPKQDPRPLPYLCHDEPYTFDINLS
VNLKGEGMSQAATICKSNFKYMYWTMLQQLTHHSVNGCNLRPGDLLASGTISGPEPENFGSMLELSWKGTKPIDL
GNGQTRKFLLDGDEVIITGYCQGDGYRIGFGQCAGKVLPALLPS

688/2825 FIGURE 613

ATGTATTTCACCAGTAGCAAATGAGATGAACCATCTTCCTGCACACAGCCACGATTTGCAAAGGATGTTCACGGA AGACCAGGGTGTAGATGACAGGCTGCTCTATGACATTGTATTCAAGCACTTCAAAAGAAATAAGGTGGAGATTTC AAATGCAATAAAAAGACATTTCCATTCCTCGAGGGCCTCCGTGATCGTGATCTCATCACAAATAAAATGTTTGA AGATTCTCAAGATTCTTGTAGAAACCTGGTCCCTGTACAGAGAGTGGTGTACAATGTTCTTAGTGAACTGGAGAA GACATTTAACCTGCCAGTTCTGGAAGCACTGTTCAGCGATGTCAACATGCAGGAATACCCCGATTTAATTCACAT GTCTGGCCTCCAACTAAGTCTTGAACAAGGAACTGGTGAAAACTCTTTTCGAAGCCTGACTTGGCCACCTTCGGG TTCCCCATCTCATGCTGGTACAACCCCACCTGAAAATGGACTCTCAGAGCACCCCTGTGAAACAGAACAGATAAA AAAGGCTGAGCCAACAGAGTCCTGCGAACAAATTGCTGTCCAAGTGAATAATGGGGATGCTGGAAGGGAGATGCC TCATCATAACCAGGCATCTGACATAATAGTCATCAGCAGTGAGGACTCTGAAGGATCCACTGACGTTGATGAGCC CTTAGAAGTCTTCATCTCAGCACCGAGAAGTGAGCCTGTGATCAATAATGACAACCCTTTAGAATCAAATGATGA AAAGGAGGCCAAGAAGCCACTTGCTCACGACCCCAGATTGTACCAGAGCCCATGGATTTCAGAAAATTATCTAC ATTCAGAGAAAGTTTTAAGAAAAGAGTGATAGGACAAGACCACGACTTTTCAGAATCCAGTGAGGAGGAGGCGCC CGCAGAAGCCTCAAGCGGGGCACTGAGAAGCAAGCATGGTGAGAAGGCTCCTATGACTTCTAGAAGTACATCTAC $\tt TTGGAGAATACCCAGCAGGAAGAGACGTTTCAGCAGTAGTGACTTTTCAGACCTGAGTAATGGAGAAGAGCTTCA$ GGAAACCTGCAGCTCATCCCTAAGAAGAGGGTCAGGATCACAGCCACAAGAACCTGAAAATAAGAAGTGCTCCTG TGTCATGTGTTTTCCAAAAGGTGTGCCAAGAAGCCAAGAAGCAAGGACTGAAAGTAGTCAAGCATCTGACATGAT GGATACCATGGATGTTGAAAACAATTCTACTTTGGAAAAACACAGTGGGAAAAGAAGAAAAAAAGAGAAGGCATAG CCAAAAGAAAGATGGCAACAAAGAGGAAGAAAAGCCAACACTAGACCTTTGAAAAGAAGAAGAAAAAAGAGGTCC AAGAATTCCCAAAGATGAAAATATTAATTTTAAACAATCTGAACTTCCTGTGACCTGTGGTGAGGTGAAGGGCAC TCTATATAAGGAGCGATTCAAACAAGGAACCTCAAAGAAGTGTATACAGAGTGAGGATAAAAAGTGGTTCACTCC CAGGGAATTTGAAATTGAAGGAGACCGCGGAGCATCCAAGAACTGGAAGCTAAGTATACGCTGCGGTGGATATAC CCTGAAAGTCCTGATGGAGAACAAATTTCTGCCAGAACCACCAAGCACAAGAAAAAAGAGAATACTGGAATCTCA CAACAATACCTTAGTTGACCCTTGTGAGGAGCATAAGAAGAAGAACCCAGATGCTTCAGTCAAGTTCTCAGAGTT TTTAAAGAAGTGCTCAGAGACATGGAAGACCATTTTTGCTAAAGAGAAAGGAAAATTTGAAGATATGGCAAAGGC TCCCAATGCACCCAAGAGGCCTCCTTTGGCCTTTTTCCTGTTCTGCTCTGAGTATCGCCCAAAAATCAAAGGAGA ACATCCTGGCCTGTCCATTGATGATGTTGTGAAGAAACTGGCAGGGATGTGGAATAACACCGCTGCAGCTGACAA GCAGTTTTATGAAAAGAAGGCTGCAAAGCTGAAGGAAAAATACAAAAAGGATATTGCTGCATATCGAGCTAAAGG ${\tt AGAGGATGAACAAGAGGAGAAAATGAAGAAGATGATGATAAA} {\color{red}{\textbf{TAAA}}} {\tt GTTGCTTCTAGTGCAGTTTTTTTCTTGTC}$ TATAAAGCATTTAAGCTGCCTGTACACAACTCACTCCTTTTAAAGAAAAAACTTCAACGTAAGACTGTGTAAGA TTTGTTTTTAAACCGTACACTGTGTTTTTTTGTATAGTTAACCACTACCGAATGTGTCTTCAGATAGCCCTGTCC ${\tt TGGTGGTATTTAGCCACTAACCTTTGCCTGGTACAGTATGGGGGTTGTAAATTGGCATGGAAATTTAAAGCAGGT}$ TCTTGTTAGTGCACAGCACAAATTAGTTGTATAGGAGGATGGTAGTTTTTTCACCTTCAGTTGTCTCTGATGTAG TTTTGTTGACATTCTGAATGCTTCTAAGTAAATACAATTTTTAAAAAACCGTATGAGGGAACTGTGTAGACAAGG TACCAGGTCAGTCTTCTTCCATGTTCTATTAGCTCCACAAAGCCAATCTCAATCCCTCAAAACAATCTTGTCATA CTTGAAAATATGACACTCTAGTCAAAGCCTTGGTAAAATAATCAGTGTTTCCAATCTGTCCTGTTACAAAAGAAA CAGATTATTATTGAACTTATGCAAATAACCATTGTCATAAGAATGTTTATGAATAGTTTCCAAATTATGGCAAAT TCATGTAGAGAGAAAAGTAACTGTTTTGGTTTTGCTCACAAAAGTCTACTTTACCTAAGGGCTGTCAGATATA AGTAACTTAAAAGAAAGAAGTTTTCTTGACTTTTGAAAACAAAATATGAAAAGAATCGGCAATGTTTCAAACA

689/2825 FIGURE 614

MAGGGGDLSTRRLNECISPVANEMNHLPAHSHDLQRMFTEDQGVDDRLLYDIVFKHFKRNKVEISNAIKKTFPFL
EGLRDRDLITNKMFEDSQDSCRNLVPVQRVVYNVLSELEKTFNLPVLEALFSDVNMQEYPDLIHIYKGFENVIHD
KLPLQESEEEEREERSGLQLSLEQGTGENSFRSLTWPPSGSPSHAGTTPPENGLSEHPCETEQINAKRKDTTSDK
DDSLGSQQTNEQCAQKAEPTESCEQIAVQVNNGDAGREMPCPLPCDEESPEAELHNHGIQINSCSVRLVDIKKEK
PFSNSKVECQAQARTHHNQASDIIVISSEDSEGSTDVDEPLEVFISAPRSEPVINNDNPLESNDEKEGQEATCSR
PQIVPEPMDFRKLSTFRESFKKRVIGQDHDFSESSEEEAPAEASSGALRSKHGEKAPMTSRSTSTWRIPSRKRRF
SSSDFSDLSNGEELQETCSSSLRRGSGSQPQEPENKKCSCVMCFPKGVPRSQEARTESSQASDMMDTMDVENNST
LEKHSGKRRKKRRHRSKVNGLQRGRKKDRPRKHLTLNNKVQKKRWQQRGRKANTRPLKRRKRGPRIPKDENINF
KQSELPVTCGEVKGTLYKERFKQGTSKKCIQSEDKKWFTPREFEIEGDRGASKNWKLSIRCGGYTLKVLMENKFL
PEPPSTRKKRILESHNNTLVDPCEEHKKKNPDASVKFSEFLKKCSETWKTIFAKEKGKFEDMAKADKAHYEREMK
TYIPPKGEKKKKFKDPNAPKRPPLAFFLFCSEYRPKIKGEHPGLSIDDVVKKLAGMWNNTAAADKQFYEKKAAKL
KEKYKKDIAAYRAKGKPNSAKKRVVKAEKSKKKKEEEEDEEDEQEEENEEDDDK

690/2825 FIGURE 615

GAGGCAGTTCTGTTGCCACTCTCTCTCTGTCAATGATGGATCTCAGAAATACCCCAGCCAAATCTCTGGACAAG TTCATTGAAGACTATCTCTTGCCAGACACGTGTTTCCGCATGCAAATCGACCATGCCATTGACATCATCTGTGGG GGCAAGGGCACCCTCAGAGGCCGATCTGACGCTGACCTGGTTGTCTTCCTCAGTCCTCTCACCACTTTTCAG CTTTCCGTGAAGTTTGAGGTCCAGGCTCACGCTGGGGCAACCCCCGTGCGCTCAGCTTCGTACTGAGTTCGCTC CAGCTCGGGGAGGGGGGGGTGGATTCGATGTGCCTGCCTTTGATGCCCTGGGTCAGTTGACTGGCAGCTATAAA CCTAACCCCCAAATCTATGTCAAGCTCATCGAGGAGTGCACCGACCTGCAGAAAGAGGGGCGAGTTCTCCACCTGC TTCACAGAACTACAGAGAGACTTCCTGAAGCAGCGCCCCACCAAGCTCAAGAGCCTCATCCGCCTAGTCAAGCAC TGGTACCAAAATTGTAAGAAGAAGCTTGGGAAGCTGCCACCTCAGTATGCCCTGGAGCTCCTGACGGTCTATGCT TGGGAGCGAGGGAGCATGAAAACACATTTCAACACAGCCCAAGGATTTCGGACGGTCTTGGAATTAGTCATAAAC TACCAGCAACTCTGCATCTACTGGACAAAGTATTATGACTTTAAAAACCCCATTATTGAAAAGTACCTGAGAAGG CAGCTCACGAAACCCAGGCCTGTGATCCTGGACCCGGCGGACCCTACAGGAAACTTGGGTGGTGGAGACCCAAAG GGTTGGAGGCAGCTGGCACAAGAGGCTGAGGCCTGGCTGAATTACCCATGCTTTAAGAATTGGGATGGGTCCCCA GTGAGCTCCTGGATTCTGCTGGCTGAAAGCAACAGTACAGACGATGAGACCGACGATCCCAGGACGTATCAGAAA TATGGTTACATTGGAACACATGAGTACCCTCATTTCTCTCATAGACCCAGCACGCTCCAGGCAGCATCCACCCCA CAGGCAGAAGAGGACTGGACCTGCACCATCCTC**TGA**ATGCCAGTGCATCTTGGGGGAAAGGGCTCCAGTGTTATC TGGACCAGTTCCTTCATTTTCAGGTGGGACTCTTGATCCAGAGAAGACAAAGCTCCTCAGTGAGCTGGTGTATAA TCCAAGACAGAACCCAAGTCTCCTGACTCCTGGCCTTCTATGCCCTCTATCCTATCATAGATAACATTCTCCACA TTCCAGCCTTGACTTTCTTCTGTGCACCTGATGGGAGGGTAATGTCTAATGTATTATCAATAACAATAAAAATAA AGCAAATACCAAAAA

691/2825 FIGURE 616

MMDLRNTPAKSLDKFIEDYLLPDTCFRMQIDHAIDIICGFLKERCFRGSSYPVCVSKVVKGGSSGKGTTLRGRSD ADLVVFLSPLTTFQDQLNRRGEFIQEIRRQLEACQRERALSVKFEVQAPRWGNPRALSFVLSSLQLGEGVEFDVL PAFDALGQLTGSYKPNPQIYVKLIEECTDLQKEGEFSTCFTELQRDFLKQRPTKLKSLIRLVKHWYQNCKKKLGK LPPQYALELLTVYAWERGSMKTHFNTAQGFRTVLELVINYQQLCIYWTKYYDFKNPIIEKYLRRQLTKPRPVILD PADPTGNLGGGDPKGWRQLAQEAEAWLNYPCFKNWDGSPVSSWILLAESNSTDDETDDPRTYQKYGYIGTHEYPH FSHRPSTLQAASTPQAEEDWTCTIL

692/2825 FIGURE 617

GGCTGTCTGCCTCGGTACCTGTTACTGCTGCTACTTCCTCGTTTGACACCTTCCTGGAATCTCTCTTGATTTTTG AGGAAATACCTAGTAACAAACATGACTTCTGGCTTATATCTGCTCCTGGGGAGAAAACCTGTCAGCAAACA TGGGAGAAATTGCATGCGGCAACTTCAAAGAACAATAATCTTGCTGTCACTTCCAAGTTCAATATTCCTGACTTA AAGGTTGGCACGTTGGATGTCTTGGTTGGCTTGTCAGATGAACTGGCTAAACTGGATGCATTTGTAGAAGGAGTG GTTAAGAAAGTAGCTCAATACATGGCTGATGTATTGGAAGATAGCAAAGACAAAGTTCAAGAGAATCTGTTGGCT AATGGAGTGGACTTGGTTACTTATATAACAAGGTTCCAGTGGGACATGGCCAAATATCCAATCAAGCAGTCCCTG AAAAATATTTCTGAAATAATTGCCAAGGGAGTAACTCAGATTGATAATGACCTGAAATCTCGAGCATCTGCATAC AATAACCTGAAAGGAAATCTTCAGAATTTGGAACGAAAGAATGCAGGAAGTTTGCTAACTAGAAGTCTAGCAGAA ATTGTGAAGAAGGATGACTTTGTTCTTGATTCAGAGTATCTCGTCACATTACTGGTAGTAGTTCCCAAGTTAAAC CACAACGACTGGATTAAGCAGTATGAAACACTAGCCGAAATGGTAGTTCCAAGGTCTAGCAATGTTCTTTCAGAG GACCAAGACAGTTACCTGTGTAATGTCACCTTGTTTAGGAAGGCAGTTGATGACTTCAGACACAAAGCCAGAGAA AACAAATTCATTGTTCGTGACTTCCAGTATAATGAAGAGGAGATGAAAGCAGATAAAGAAGAAATGAACAGGCTT TCTACTGATAAGAAAAACAATTTGGACCACTTGTACGGTGGCTGAAAGTGAATTTTAGTGAAGCATTTATTGCA TGGATTCACGTGAAAGCATTACGGGTTTTCGTTGAGTCTGTTTTAAGGTATGGCTTGCCAGTGAACTTCCAAGCA ATGCTACTTCAGCCCAATAAGAAAACTTTGAAGAAACTGAGAGAGTATTACATGAATTGTATAAACATCTAGAC AGCAGTGCAGCTATTATTGATGCTCCTATGGATATTCCAGGTTTAAACCTGAGTCAACAAGAATACTACCCC TATGTGTACTACAAGATTGATTGCAACTTGCTGGAATTCAAG**TGA**AAATGGGCTCCTCCCCCGACAATCCTGTCC TTGTGTTTGTGTGTGCTAACAGAAATAAGTTGCAGTATGGTCGTACTTTTAACTCTAGTATCCTTTGCTTC TTACCCCCTTTCCTAGGTGAATTCTCCCACAGTGGTCTGTATCTCAACATTTTCTTTTAAAGGAAAAAATATAT GTTTATTTAAAGAGAAGGTCTCTTCCTTATTGATATCATGGTATGCATTAATTCCATTTGTTACTATTGTGCACA AAAGCCCTGTTCACAGGGGAATGGTGTAAACATTTATACTGTTTTGTTCACTGTATTTAGTAGACATAACTGTTG AATAGTTACTGAATCATGATGTAAAGAATATGTGACCATCTTCAGGTATGGGATTTCTGAACGTTTCAAATTTCA AAA

693/2825 FIGURE 618

MTEFWLISAPGEKTCQQTWEKLHAATSKNNNLAVTSKFNIPDLKVGTLDVLVGLSDELAKLDAFVEGVVKKVAQY
MADVLEDSKDKVQENLLANGVDLVTYITRFQWDMAKYPIKQSLKNISEIIAKGVTQIDNDLKSRASAYNNLKGNL
QNLERKNAGSLLTRSLAEIVKKDDFVLDSEYLVTLLVVVPKLNHNDWIKQYETLAEMVVPRSSNVLSEDQDSYLC
NVTLFRKAVDDFRHKARENKFIVRDFQYNEEEMKADKEEMNRLSTDKKKQFGPLVRWLKVNFSEAFIAWIHVKAL
RVFVESVLRYGLPVNFQAMLLQPNKKTLKKLREVLHELYKHLDSSAAAIIDAPMDIPGLNLSQQEYYPYVYYKID
CNLLEFK

694/2825 FIGURE 619

AGCGTCCGCTAGGCTGTCTCGCTCGGTACCTGTTACTGCTGCTACTTCCTCGTTTTGACACCTTCCTGGAATCTCT $\tt CTTGATTTTTGAGGAAATACCTAGTAACAAAC \\ \underline{ATG} \\ ACTGAGTTCTGGCTTATATCTGCTCCTGGGGAGAAAACCT$ GTCAGCAAACATGGGAGAAATTGCATGCGGCAACTTCAAAGAACAATAATCTTGCTGTCACTTCCAAGTTCAATA TAGAAGGAGTGGTTAAGAAAGTAGCTCAATACATGGCTGATGTATTGGAAGATAGCAAAGACAAAGTTCAAGAGA ATCTGTTGGCTAATGGAGTGGACTTGGTTACTTATATAACAAGGTTCCAGTGGGACATGGCCAAATATCCAATCA AGCAGTCCCTGAAAAATATTTCTGAAATAATTGCCAAGGGAGTAACTCAGATTGATAATGACCTGAAATCTCGAG CATCTGCATACAATAACCTGAAAGGAAATCTTCAGAATTTTGGAACGAAAGAATGCAGGAAGTTTGCTAACTAGAA GTCTAGCAGAAATTGTGAAGAAGGATGACTTTGTTCTTGATTCAGAGTATCTCGTCACATTACTGGTAGTAGTTC CCAAGTTAAACCACAACGACTGGATTAAGCAGTATGAAACACTAGCCGAAATGGTAGTTCCAAGGTCTAGCAATG TGAACAGGCTTTCTACTGATAAGAAAAAACAATTTGGACCACTTGTACGGTGGCTGAAAGTGAATTTTAGTGAAG CATTTATTGCATGGATTCACGTGAAAGCATTACGGGTTTTCGTTGAGTCTGTTTTAAGGTATGGCTTGCCAGTGA ACTTCCAAGCAATGCTACTTCAGCCCAATAAGAAAACTTTGAAGAAACTGAGAGAAGTATTACATGAATTGTATA AACATCTAGACAGCAGTGCAGCAGCTATTATTGATGCTCCTATGGATATTCCAGGTTTAAACCTGAGTCAACAAG AATACTACCCCTATGTGTACTACAAGATTGATTGCAACTTGCTGGAATTCAAG**TGA**AAATGGGCTCCTCCCCCGA CAATCCTGTCCTTGTGTTTTGTGTGCTAACAGAAATAAGTTGCAGTATGGTCGTACTTTTAACTCTAGTATCCT TTGCTTGCTTCTTACCCCCTTTCCTAGGTGAATTCTCCCACAGTGGTCTGTATCTCAACATTTTCTTTTTAAAGG TAAACAGAATAGTTTATTTAAAGAGAAGGTCTCTTCCTTATTGATATCATGGTATGCATTAATTCCATTTGTTAC TATTGTGCACAAAAGCCCTGTTCACAGGGGAATGGTGTAAACATTTATACTGTTTTGTTCACTGTATTTAGTAGA CATAACTGTTGAATAGTTACTGAATCATGATGTAAAGAATATGTGACCATCTTCAGGTATGGGATTTCTGAACGT TTCAAATTTCAATCAATGAGCACTGTCAACACCCCACAGGAGAAAAATTACCTGTGCAAAGGTGTATTGTGG TGTGTGTAACTTAAGATTACAGTTCTGTTTGAGAGTTAAATGATGTCATAGCTCACTTGCTATGCTGCTTCCAGG ATTTGTTATATGCTGAGGTGTAACCATTTGTGTTGTCTGACTTTCGTATGATTTAATTGAGCCAAATTTGGGTC AGAACACAAATTTGAAGATGACTTTTCAGTATATGATGGGTATTTACATTTGAACACTAGAATTTTAGGTCTCTC AAATAATTAAGAATAGAGCCAGTTTTGAATAAAGTCTAGCAGAACTATG

695/2825 FIGURE 620

MTEFWLISAPGEKTCQQTWEKLHAATSKNNNLAVTSKFNIPDLKVGTLDVLVGLSDELAKLDAFVEGVVKKVAQY MADVLEDSKDKVQENLLANGVDLVTYITRFQWDMAKYPIKQSLKNISEIIAKGVTQIDNDLKSRASAYNNLKGNL QNLERKNAGSLLTRSLAEIVKKDDFVLDSEYLVTLLVVVPKLNHNDWIKQYETLAEMVVPRSSNVLSEDQDSYLC NVTLFRKAVDDFRHKARENKFIVRDFQYNEEEMKADKEEMNRLSTDKKKQFGPLVRWLKVNFSEAFIAWIHVKAL RVFVESVLRYGLPVNFQAMLLQPNKKTLKKLREVLHELYKHLDSSAAAIIDAPMDIPGLNLSQQEYYPYVYYKID CNLLEFK

696/2825 FIGURE 621A

AAAGCCCTCAGCCTTTGTGCCCTCTCTCTCCGCCGGAGTGGCTGCAGCTCACCCCTCAGCTCCCCTTGGGGCCCAG $\tt CTGGGAGCCGAGATAGAAGCTCCTGTCGCCGCTGGGCTTCTCGCCTCCCGCAGAGGGCCCACACAGAGACCGGGAT$ <u>G</u>GCCACCTCCATGGGCCTGCTGCTGCTGCTGCTGCTCCTGACCCAGCCCGGGGCGGGGACGGGAGCTGACAC GGAGGCGGTGGTCTGCGTGGGGACCGCCTGCTACACGGCCCACTCGGGCAAGCTGAGCGCTGCCGAGGCCCAGAA CCACTGCAACCAGAACGGGGGCAACCTGGCCACTGTGAAGAGCAAGGAGGAGGCCCAGCACGTCCAGCGAGTACT GGCCCAGCTCCTGAGGCGGGGGGGCCCTGACGGCGAGGATGAGCAAGTTCTGGATTGGGCTCCAGCGAGAGAA TAACTGGCACAAGGAGCTCCGGAACTCGTGCATCTCCAAGCGCTGTGTCTCTGCTGCTGGACCTGTCCCAGCC GCTCCTTCCCAACCGCCTGCCCAAGTGGTCTGAGGGCCCCTGTGGGAGCCCAGGCTCCCCCGGAAGTAACATTGA GGGCTTCGTGTGCAAGTTCAGCTTCAAAGGCATGTGCCGGCCTCTGGCCCTGGGGGGGCCCAGGTCAGGTGACCTA GGAAGGTGACAAGGACGAGACTCAGAGTCATTATTTCCTGTGCAAGGAGAAGGCCCCCGATGTGTTCGACTGGGG CAGCTCGGGCCCCTCTGTGTCAGCCCCAAGTATGGCTGCAACTTCAACAATGGGGGCTGCCACCAGGACTGCTT TGAAGGGGGGGATGGCTCCTTCCTCTGCGGCTGCCGACCAGGATTCCGGCTGCTGGATGACCTGTGC CTCTCGAAACCCTTGCAGCTCCAGCCCATGTCGTGGGGGGGCCACGTGCGTCCTGGGGACCCCATGGGAAAAACTA CACGTGCCGCTGCCCCCAAGGGTACCAGCTGGACTCGAGTCAGCTGGACTGTGTGGACGTGGATGAATGCCAGGA CGGTCCTGGAGAGGGGCCTGTCAGGATGTGGATGAGTGTGCTCTGGGTCGCCTCGCCCTTGCGCCCAGGGCTGCAC CAACACAGATGGCTCATTTCACTGCTCCTGTGAGGAGGGCTACGTCCTGGCCGGGGAGGACGGGACTCAGTGCCA GGACGTGGATGAGTGTGTGGGCCCGGGGGGCCCCCTCTGCGACAGCTTGTGCTTCAACACACAAGGGTCCTTCCA CTGTGGCTGCCTGCCAGGCTGGGTGCTGGCCCCAAATGGGGTCTCTTGCACCATGGGGCCTGTGTCTCTGGGACC TCCCACAAGGGGCCCCGAGGGCACCCCCAAGGCTACACCCACAAGTAGACCTTCGCTGTCATCTGACGCCCC TGACGGGCAAAAGCTGCTTTTATTCTACATCCTAGGCACCGTGGTGGCCATCCTACTCCTGCTGGCCCTGGCTCT CAGTTACTCCTGGGTTCCAGAGCGAGCTGAGAGCAGGGCCATGGAGAACCAGTACAGTCCGACACCTGGGACAGA $\verb|CTGC| \underline{\textbf{TGA}} | \texttt{AAGTGAGGTGGCCCTAGAGACACTAGAGTCACCAGCCACCATCCTCAGAGCTTTGAACTCCCCATTCC}|$ AAAGGGGCACCCACATTTTTTTGAAAGACTGGACTGGAATCTTAGCAAACAATTGTAAGTCTCCTCCTTAAAGGC CCCTTGGAACATGCAGGTATTTTCTACGGGTGTTTGATGTTCCTGAAGTGGAAGCTGTGTGTTGGCGTGCCACGG TCAATTAGGTAAGAAGATCTGGTTTTTTGGTCAAAGGGAACATGTTCGGACTGGAAACATTTCTTTACATTTGCA TTCCTCCATTTCGCCAGCACAAGTCTTGCTAAATGTGATACTGTTGACATCCTCCAGAATGGCCAGAAGTGCAAT ${\tt TAACCTCTTAGGTGGCAAGGAGGCAGGAAGTGCCTCTTTAGTTCTTACATTTCTAATAGCCTTGGGTTTATTTGC}$ AAAGGAAGCTTGAAAAATATGAGAAAAGTTGCTTGAAGTGCATTACAGGTGTTTTGTGAAGTCACATAATCTACGG ACACTTGACTACGGATGTGATCAACACTAACAAGGAAACAAATTCAAGGACAACCTGTCTTTGAGCCAGGGCAGG GAAGCCCTGCAGAAAGTTCCATCAGGCTGTTTCCTAAAGGATGTGTGAACGGGAGATGATGCACTGTGTTTTGAA AGTTGTCATTTTAAAGCATTTTAGCACAGTTCATAGTCCACAGTTGATGCAGCATCCTGAGATTTTAAATCCTGA CTGCTCAAAGCCATTTAAATTATATCCTCATTTTAAAAGTTACATTTGCAAATATTTCTCCCTATGATAATGCAG CACGGCACCATTCTGCCTGGGGCACTGGAACACATTCCTGGGGGTCACCGATGGTCAGAGTCACTAGAAGTTACC

697/2825 FIGURE 621B

GTGTCTCCCTCCAAGGCCCCAAAGCCTCAGAGAAAGGGTGTTTCTGGTTTTTGCCTTAGCAATGCATCGGTCTCTG AGGTGACACTCTGGAGTGGTTGAAGGGCCACAAGGTGCAGGGTTAATACTCTTGCCAGTTTTGAAATATAGATGC TATGGTTCAGATTGTTTTTAATAGAAAACTAAAGGGGCAGGGGAAGTGAAAGGAAAGATGGAGGTTTTGTGCGGC TCGATGGGGCATTTGGAACTTCTTTTAAAGTCATCTCATGGTCTCCAGTTTTCAGTTGGAACTCTGGTGTTTAA CACTTAAGGGAGACAAAGGCTGTGTCCATTTGGCAAAACTTCCTTGGCCACGAGACTCTAGGTGATGTGTGAAGC TGGGCAGTCTGTGGTGTGGAGAGCAGCCATCTGTCTGGCCATTCAGAGGATTCTAAAGACATGGCTGGATGCGCT GCTGACCAACATCAGCACTTAAATAAATGCAAATGCAACATTTCTCCCTCTGGGCCTTGAAAATCCTTGCCCTTA TCATTTGGGGTGAAGGAGACATTTCTGTCCTTGGCTTCCCACAGCCCCAACGCAGTCTGTGTATGATTCCTGGGA TCCAACGAGCCCTCTATTTTCACAGTGTTCTGATTGCTCTCACAGCCCAGGCCCATCGTCTGTTCTCTGAATGC AGCCCTGTTCTCAACAACAGGGAGGTCATGGAACCCCTCTGTGGAACCCACAAGGGGAGAAATGGGTGATAAAGA ATCCAGTTCCTCAAAACCTTCCCTGGCAGGCTGGGTCCCTCTCCTGCTGGGTGGTGCTTTCTCTTGCACACCACT CCCACCACGGGGGGAGAGCCAGCAACCCAACCAGACAGCTCAGGTTGTGCATCTGATGGAAACCACTGGGCTCAA ${\tt ACACGTGCTTTATTCTCCTGTTTATTTTTGCTGTTACTTTGAAGCATGGAAATTCTTGTTTGGGGGATCTTGGGG}$ CTACAGTAGTGGGTAAACAAATGCCCACCGGCCAAGAGGCCATTAACAAATCGTCCTTGTCCTGAGGGGCCCCAG CTTGCTCGGGCGTGGCACAGTGGGGAATCCAAGGGTCACAGTATGGGGAGAGGTGCACCCTGCCACCTGCTAACT TCTCGCTAGACACAGTGTTTCTGCCCAGGTGACCTGTTCAGCAGCAGAACAAGCCAGGGCCATGGGGACGGGGA AGTTTTCACTTGGAGATGGACACCAAGACAATGAAGATTTGTTGTCCAAATAGGTCAATAATTCTGGGAGACTCT CTTCTTTGTCATTTGAGAAAGGATGCAGGAGGACAATTCCCACAGATAATCTGAGGAATGCAGAAAAACCAGGGC AGGACAGTTATCGACAATGCATTAGAACTTGGTGAGCATCCTCTGTAGAGGGGACTCCACCCCTGCTCAACAGCTT GGCTTCCAGGCAAGACCAACCACATCTGGTCTCTGCCTTCGGTGGCCCACACACCTAAGCGTCATCGTCATTGCC ATAGCATCATGATGCAACACATCTACGTGTAGCACTACGACGTTATGTTTGGGTAATGTGGGGATGAACTGCATG TTAGCCAGTGGTGGAGGACAAGGCTTCAGGAAGGGCCACCACATGCCATCTTCCCTGCGATCAGGCAAAAAG TGGAATTAAAAAGTCAAACCTTTATATGCATGTGTTATGTCCATTTTGCAGGATGAACTGAGTTTAAAAGAATTT $\verb|TTTTTCTCTTCAAGTTGCTTTTTCCATCCTCATCACAAGCCCTTGTTTGAGTGTCTTATCCCTGAGCAA|$ TCTTTCGATGGATGGAGATGATCATTAGGTACTTTTGTTTCAACCTTTATTCCTGTAAATATTTCTGTGAAAACT AGGAGAACAGAGATGAGATTTGACAAAAAAAATTGAATTAAAAATAACACAGTCTTTTTAAAACTAACATAGGA AAGCCTTTCCTATTATTTCTCTTCTTAGCTTCTCCATTGTCTAAATCAGGAAAACAGGAAAACACAGCTTTCTAG CAGCTGCAAAATGGTTTAATGCCCCCTACATATTTCCATCACCTTGAACAATAGCTTTAGCTTGGGAATCTGAGA TATGATCCCAGAAAACATCTGTCTCTACTTCGGCTGCAAAACCCATGGTTTAAATCTATATGGTTTGTGCATTTT CTCAACTAAAAATAGAGATGATAATCCGAATTCTCCATATATTCACTAATCAAAGACACTATTTTCATACTAGAT TTCTATTTAGGTAGAAGCTCTGGAATCCCTTTATTGTGCTGTTGCTCTTATCTGCAAGGTGGCAAGCAGTTCTT TTCAGCAGATTTTGCCCACTATTCCTCTGAGCTGAAGTTCTTTGCATAGATTTGGCTTAAGCTTGAATTAGATCC CTGCAAAGGCTTGCTCTGTGATGTCAGATGTAATTGTAAATGTCAGTAATCACTTCATGAATGCTAAATGAGAAT GTAAGTATTTTTAAATGTGTGTATTTCAAATTTGTTTGACTAATTCTGGAATTACAAGATTTCTATGCAGGATTT ACCTTCATCCTGTGCATGTTTCCCAAACTGTGAGGAGGGAAGGCTCAGAGATCGAGCTTCTCCTCTGAGTTCTAA CAAAATGGTGCTTTGAGGTCAGCCTTTAGGAAGGTGCAGCTTTGTTGTCCTTTTGAGCTTTCTGTTATGTGCCTA TCCTAATAAACTCTTAAACACATT

698/2825 FIGURE 622

MATSMGLLLLLLLLTQPGAGTGADTEAVVCVGTACYTAHSGKLSAAEAQNHCNQNGGNLATVKSKEEAQHVQRV LAQLLRREAALTARMSKFWIGLQREKGKCLDPSLPLKGFSWVGGGEDTPYSNWHKELRNSCISKRCVSLLLDLSQ PLLPNRLPKWSEGPCGSPGSPGSNIEGFVCKFSFKGMCRPLALGGPGQVTYTTPFQTTSSSLEAVPFASAANVAC GEGDKDETQSHYFLCKEKAPDVFDWGSSGPLCVSPKYGCNFNNGGCHQDCFEGGDGSFLCGCRPGFRLLDDLVTC ASRNPCSSSPCRGGATCVLGPHGKNYTCRCPQGYQLDSSQLDCVDVDECQDSPCAQECVNTPGGFRCECWVGYEP GGPGEGACQDVDECALGRSPCAQGCTNTDGSFHCSCEEGYVLAGEDGTQCQDVDECVGPGGPLCDSLCFNTQGSFHCGCLPGWVLAPNGVSCTMGPVSLGPPSGPPDEEDKGEKEGSTVPRAATASPTRGPEGTPKATPTTSRPSLSSDA PITSAPLKMLAPSGSSGVWREPSIHHATAASGPQEPAGGDSSVATQNNDGTDGQKLLLFYILGTVVAILLLLALA LGLLVYRKRRAKREEKKEKKPQNAADSYSWVPERAESRAMENQYSPTPGTDC

699/2825 FIGURE 623A

TGCCTCTGCTGAGGTGATCTGGCGCAGAGCGGAGGAGGTGCTTGGCGCTTCTCAGGCTCCTCTCCCCTTGCG GCCTTTCTAACGTTGGCCCTGCTCTTGTGGCCTCCCGCAGA**TG**TGGATGACGCCCAAAAGAAGCAAGATGGAAG TCGACGAGGCTCTAGTTTTCCGGCCCGAGTGGACCCAGCGTTATTTGGTGGTGGAGCCTCCGGAGGGCGATGGGG CCCTGTGCCTGGTCTGTCGCCGCCTCATCGTAGCTACCCGCGAACGCGACGTCAGGCGCCACTACGAGGCTGAGC ACGAATACTACGAGCGGTATGTGGCGGACGGCGAGCGCGCCCTGGTGGAGCGTCTGCGTCAGGGCGACTTGC CCGTGGCCTCCTTCACTCCTGAAGAGAGAGCTGCTCGTGCAGGCCTCTGGCCGCCTCTTGGCCTTGAAGG GTCGCGGCTGGGGTGAGGGGGACTTTGTATACCAGTGCATGGAGGGTGTTGCTGAGAGAGGTACTGCCCGAGCATG TAAGCGTCCTGCAAGGCGTTGACTTATCTCCAGATATCACAAGGCAGAGGATCCTGAGCATTGACAGGAATCTAC GCAACCAGCTTTTTAACCGAGCCAGGGACTTTAAAGCCTATTCTCTTGCCTTGGACGACCAGGCTTTTGTGGCCT ATGAGAACTACCTCCTGGTCTTTATCCGCGGTGTAGGCCCTGAGTTGGAGGTGCAAGAAGATCTTCTGACCATAA ${\tt TCAACCTGACTCATTTCAGTGTTGGTGCGCTCATGTCGGCAATCCTAGAGTCCCTGCAGACAGCAGGGCTTA}$ GCTTGCAGAGAATGGTTGGACTGACCACGACCCATACTTTGAGGATGATTGGTGAGAACTCAGGACTCGTCTCAT TGAGCTCCTATGATGTAGATGTTAATCAGATCATAAATACCATATCCGAATGGATAGTTTTGATTAAGACCAGAG GCGTTAGGCGACCTGAATTTCAGACTTTACTAACGGAATCTGAATCAGAGCATGGTGAAAGGGTTAATGGACGAT GTCTGAACAATTGGCTTAGGAGAGGGAAAACTTTAAAACTAATATTCTCTCTAAGAAAAGAAATGGAAGCGTTCT TTATGGAACACCTTCGAGAACTCAGTGAAGAATTACGAGTTAGTAAAGTCTTTGCTGCTGCTGCCTTTGACCATA TTTGTACTTCGAAGTTAAGCTGAATTTATTTCAAAGACATATTGAGGAAAAAAATCTAACAGACTTTCCTGCCC TCAGAGAAGTTGTTGATGAGCTAAAACAGCAAAATAAGGAAGATGAAAAAATATTTGATCCTGATAGGTATCAAA TGGTGATCTGTCGTCTCCAAAAAGAATTTGAGAGACATTTTAAGGACCTCAGGTTCATTAAAAAGGACTTAGAAC TTTTTTCAAATCCATTTAACTTTAAACCTGAATATGCACCTATTTCAGTGAGGGTGGAGCTAACAAAACTTCAGG CAAACACTAATCTTTGGAATGAATACAGAATCAAAGACTTGGGGCAGTTTTATGCTGGATTGTCTGCTGAATCCT ACCCAATTATCAAAGGGGTTGCCTGTAAGGTGGCATCCTTGTTTGATAGTAACCAAATCTGTGAAAAGGCTTTTT CATATTTGACTCGAAACCAACACTTTGAGTCAGCCATTAACAGATGAGCATCTCCAAGCCCTGTTTCGGGTTG TACAAGATTGAAAAACTCAACAAGAATTTAATTCTAAAAGCAAAAATTGGTTTGAGTTTTCAAGTTTACTAATTT ATCTCAAATGGCAGCATGGGACTGAAACATGAGAATGCCACCTTTTTTAAAACTTAGTTTAGTGACAAAGTCATT GTCTTTTATGATATAGTTAATTTTAAAGAGATTTAGTATTAATGTGAGTTGAATTTGCAGTCTGTTTTTTAGGTG TTCTGAAGATAAATGCCAAAAATTTCAGCTCTTATTTTAATGGAGTGTTAAAATTCTGATTCATGTAGTCTTAAA TTATCAACTCCTTAAATGTGCTTTTGAACCAATTTGCAGAAGCTCACATAGCAAGTTCATAAGGTTCCAAAAAGG GAGGAAGTCATTAGAATCATTTTTAAGTTTCAGATATAGGAGACTTCATGCAATTTGGAGATAAGACTAATTATT GGGGGTTTTCCTTGGATTTTTTTTTTATAACTGGGGGCTATTTTATCAGCTTGCCTATTAAAGGACTATGGTAA AAAAACGATGAGGAAAAAAGATTGCACTCCAGGATTAGGAGGTGTGAGATATTTTAGCTTTTTTGTCTTATCTGC GTGGGTATTGCTGCTTTATTTTAAAAAATCCTGCCTAAAGTAAACACTTTGTTTTAAAATGATACAGTATCAGAT TTTGTTAGATGCTAGAAATGGATTTATTCTAAAATTTGGAACTGTCGTACACATTCTATATGTAAGATAGCACAC AAGTAGAAATATTTAAAAGCAGTCTTATTCACAGATTGCAGTAATTCTGTATTTCTACTAAGATAATCTGCTTTG TGCCAAAACAGTAATTTCCAAACTTCTGTTCACCATGAAAAGGCAATCTTAAAGTTCATTATGTAAAACTAATTA TAAACAGGACCCAATTTATATTCATAGATCCTCTCAAGTATTATACAATTTAAAAACTCTTGTTCCAAAGTCCTG TCTTAACTATTGAAACACCTTAATCTGTGGTTACTAATCCAGCAAATTCAAGGAACCAGGCTATGACTAAGAATT ${\tt TAGGTGGAATTGATGTCTGGGCAATTAAAATAAATGGCATAAGAGCTTAAAAAACCAAAGTTGTGCCAGTGGCTTT}$ ${\tt CAACTAGAGGCAGTAACCTGTCATTCCAGAGGATGCTGAGAAATGTGTAGGGGCACTTTTTTGGTTGTCATATTT}$ ACTAGGGGCTTCTGTTGGCATTTAAGCCTAAAGACACTCACCCCTGCAGTGCATGGGACAGCCTGGCACAATGAA GAATTAGCCCTCCCAAAATGTAGATTATTTTATTTCAAGGGATAGGGCAGATTACCATTAGAAGCAAAATTAAAA

700/2825 FIGURE 623B

701/2825 FIGURE **624**

MWMTPKRSKMEVDEALVFRPEWTQRYLVVEPPEGDGALCLVCRRLIVATRERDVRRHYEAEHEYYERYVADGERA ALVERLRQGDLPVASFTPEERAARAGLGLCRLLALKGRGWGEGDFVYQCMEVLLREVLPEHVSVLQGVDLSPDIT RQRILSIDRNLRNQLFNRARDFKAYSLALDDQAFVAYENYLLVFIRGVGPELEVQEDLLTIINLTHHFSVGALMS AILESLQTAGLSLQRMVGLTTTHTLRMIGENSGLVSYMREKAVSPNCWNVIHYSGFLHLELLSSYDVDVNQIINT ISEWIVLIKTRGVRRPEFQTLLTESESEHGERVNGRCLNNWLRRGKTLKLIFSLRKEMEAFLVSVGATTVHFSDK QWLCDFGFLVDIMEHLRELSEELRVSKVFAAAAFDHICTFEVKLNLFQRHIEEKNLTDFPALREVVDELKQQNKE DEKIFDPDRYQMVICRLQKEFERHFKDLRFIKKDLELFSNPFNFKPEYAPISVRVELTKLQANTNLWNEYRIKDL GQFYAGLSAESYPIIKGVACKVASLFDSNQICEKAFSYLTRNQHTLSQPLTDEHLQALFRVATTEMEPGWDDLVR ERNESNP

702/2825 FIGURE 625

703/2825 FIGURE **626**

 ${\tt MLTELEKALNSIIDVYHKYSLIKGNFHAVYRDDLKKLLETECPQYIRKKGADVWFKELDINTDGAVNFQEFLILV} \\ {\tt IKMGVAAHKKSHEESHKE}$

704/2825 FIGURE **627**

ACCACGTGCGGCGCACGGGATCCTCCAGTTCCTGCACATCTACCACGCCGTCAAGGACCGGCACAAGGACGTTC TCAAGTGGGGCGATGAGGTGGAATACATGTTGGTATCTTTTGATCATGAAAAATAAAAAAGTCCGGTTGGTCCTGT CAGAGTATGGGAGTTACATGATTGAAGGGACACCAGGACAGCCCTACGGAGGAACAATGTCCGAGTTCAATACAG TTGAGGCCAACATGCGAAAACGCCGGAAGGAGGCTACTTCTATATTAGAAGAAAATCAGGCTCTTTGCACAATAA $\verb|CTTCATTTCCCAGATTAGGCTGTCCTGGGTTCACACTGCCCGAGGTCAAACCCAACCCAGTGGAAGGAGGAGCTT| \\$ CCAAGTCCCTCTTCTTTCCAGATGAAGCAATAAACAAGCACCCTCGCTTCAGTACCTTAACAAGAAATATCCGAC ATAGGAGAGAAAAAGGTTGTCATCAATGTACCAATATTTAAGGACAAGAATACACCATCTCCATTTATAGAAA CATTTACTGAGGATGATGAAGCTTCAAGGGCTTCTAAGCCGGATCATATTTACATGGATGCCATGGGATTTGGAA TGGGCAATTGCTGTCTCCAGGTGACATTCCAAGCCTGCAGTATATCTGAGGCCAGATACCTTTATGATCAGTTGG CTACTATCTGTCCAATTGTTATGGCTTTGAGTGCTGCATCTCCCTTTTACCGAGGCTATGTGTCAGACATTGATT GTCGCTGGGGAGTGATTTCTGCATCTGTAGATGATAGAACTCGGGAGGAGCGAGGACTGGAGCCATTGAAGAACA ATAACTATAGGATCAGTAAATCCCGATATGACTCAATAGACAGCTATTTATCTAAGTGTGGTGAGAAATATAATG ACATCGACTTGACGATAGATAAAGAGATCTACGAACAGCTGTTGCAGGAAGGCATTGATCATCTCCTGGCCCAGC ATGTTGCTCATCTCTTTATTAGAGACCCACTGACACTGTTTGAAGAGAAAATACACCTGGATGATGCTAATGAGT CTGACCATTTTGAGAATATTCAGTCCACAAATTGGCAGACAATGAGATTTAAGCCCCCTCCTCCAAACTCAGACA TTGGATGGAGAGTAGAATTTCGACCCATGGAGGTGCAATTAACAGACTTTGAGAACTCTGCCTATGTGGTGTTTG TGGTACTGCTCACCAGAGTGATCCTTTCCTACAAATTGGATTTTCTCATTCCACTGTCAAAGGTTGATGAGAACA TGAAGGTAGCACAGAAAAGAGATGCTGTCTTGCAGGGAATGTTTTATTTCAGGAAAGATATTTGCAAAGGTGGCA ATGCAGTGGTGGATGGTTGTGGCAAGGCCCAGAACAGCACGGAGCTCGCTGCAGAGGAGTACACCCTCATGAGCA TAGACACCATCATCAATGGGAAGGAAGGTGTTTTCCTGGACTGATCCCAATTCTGAACTCTTACCTTGAAAACA TGGAAGTGGATGTGGACACCAGATGTAGTATTCTGAACTACCTAAAGCTAATTAAGAAGAGAGCATCTGGAGAAC ATGAAATGAATTATAGCCTTATTTTGAAGTGTAACCAAATTGCAAATGAATTATGTGAATGCCCAGAGTTACTTG GATCAGCATTTAGGAAAGTAAAATATAGTGGAAGTAAAACTGACTCATCCAAC**TAG**ACATTCTACAGAAAGAAAA ATGCATTATTGACGAACTGGCTACAGTACCATGCCTCTCAGCCCGTGTGTATAATATGAAGACCAAATGATAGAA GTGTACATGTACATAGTAAAGTATTTTTGATTAACAATGTATTTTAATAACATATCTAAAGTCATCATGAACTGG $\verb|CTTGTACATTTTTAAATTCTTACTCTGGAGCAACCTACTGTCTAAGCAGTTTTGTAAATGTACTGGTAATTGTAC| \\$ AATACTTGCATTCCAGAGTTAAAATGTTTACTGTAAATTTTTTGTTCTTTTAAAGACTACCTGGGACCTGATTTAT TGAAATTTTTCTCTTTAAAAACATTTTCTCTCGTTAATTTTCCTTTGTCATTTCCTTTGTTGTCTACATTAAATC ACTTGAATCCATTGAAAGTGCTTCAAGGGTAATCTTGGGTTTCTAGCACCTTATCTATGATGTTTCTTTTGCAAT AAAAAAAA

705/2825 FIGURE 628

MGLLSQGSPLSWEETKRHADHVRRHGILQFLHIYHAVKDRHKDVLKWGDEVEYMLVSFDHENKKVRLVLSGEKVL ETLQEKGERTNPNHPTLWRPEYGSYMIEGTPGQPYGGTMSEFNTVEANMRKRRKEATSILEENQALCTITSFPRL GCPGFTLPEVKPNPVEGGASKSLFFPDEAINKHPRFSTLTRNIRHRRGEKVVINVPIFKDKNTPSPFIETFTEDD EASRASKPDHIYMDAMGFGMGNCCLQVTFQACSISEARYLYDQLATICPIVMALSAASPFYRGYVSDIDCRWGVI SASVDDRTREERGLEPLKNNNYRISKSRYDSIDSYLSKCGEKYNDIDLTIDKEIYEQLLQEGIDHLLAQHVAHLF IRDPLTLFEEKIHLDDANESDHFENIQSTNWQTMRFKPPPPNSDIGWRVEFRPMEVQLTDFENSAYVVFVVLLTR VILSYKLDFLIPLSKVDENMKVAQKRDAVLQGMFYFRKDICKGGNAVVDGCGKAQNSTELAAEEYTLMSIDTIIN GKEGVFPGLIPILNSYLENMEVDVDTRCSILNYLKLIKKRASGELMTVARWMREFIANHPDYKQDSVITDEMNYS LILKCNQIANELCECPELLGSAFRKVKYSGSKTDSSN

706/2825 FIGURE **629**

 $\verb|CTGTGACACTGCCAGCAGCGCGCAGAGGGAGGGATGGGGGCCGTATCGGCGTAGGGGCCCTCGGAAAGAACGGA|\\$ TATTGCTGTGACACCGCGGGGACGCTCTGAAGGGACGACTGTCGGTGTGGCACCGGTGCACGCTGAAGGAGCCGG GGGGCCGTGCTCTTTTCCTGGACAGTGTATCTTTGGGAGACCTTCCTAGCACAGCGGCAGAGAAGGATATAT AAAACAACTCATGTACCACCGGAGTTAGGACAGATCATGGATTCTGAAACATTTGAGAAATCTCGACTCTAT ${\tt CAACTGGATAAAAGCACTTTCAGCTTCTGGTCAGGACTCTATTCAGAGACTGAAGGCACTCTTATTCTTCTTTT}$ GGAGGAATACCTTATCTCTGGAGACTTTCTGGACGGTTCTGTGGTTATGCTGGCTTTTGGACCAGAATATGAGATC ACTCAGTCCCTGGTGTTTCTGCTGTTGGCTACACTTTTCAGTGCATTGACTGGTTTTGCCATGGAGTCTTTATAAT ACTTTTGTGATAGAAGAAAACATGGCTTCAATCAACAGACTTTGGGGTTCTTCATGAAAGATGCAATCAAGAAA TTTGTTGTGACTCAGTGTATTTTGTTGCCTGTGTCTTCACTTCTACTTTACATTATTAAAATTGGGGGTGACTAT TTTTTTATTTATGCCTGGCTGTTCACATTAGTTGTGTCTCTGGTTCTTGTCACAATCTATGCTGATTATATTGCC CCTTTATTTGACAAATTCACACCTCTGCCTGAGGGAAAGCTTAAAGAAGAAATTGAAGTAATGGCAAAGAGTATT GACTTTCCTTTGACGAAGGTGTATGTTGTGGAAGGATCTAAACGCTCTTCCCACAGCAATGCTTATTTTTATGGC TTCTTCAAGAACAAGCGAATAGTTTTGTTTGACACTCTACTAGAAGAGTACTCTGTACTAAAACAAAGACATCCAG GAGGATTCTGGCATGGAACCCCGCAATGAGGAAGAAGGGGAACAGTGAAGAAATAAAAGCTAAAAGTTAAAAATAAG AAACAAGGATGTAAAAATGAGGAGGTACTCGCTGTACTAGGCCATGAACTGGGGCACTGGAAGTTGGGACATACA GAGCTTTTTGCTGCATTTGGTTTTTATGATAGCCAACCCACTCTTATTGGACTATTGATCATCTTCCAGTTTATT TTTTCACCTTACAATGAGGTTCTTTCTTTTTGCCTAACAGTCCTAAGCCGCAGATTTGAGTTTCAAGCTGATGCA TTTGCCAAGAAACTTGGGAAGGCTAAAGACTTATATTCTGCTTTAATCAAACTTAACAAAGATAACTTGGGATTC CCTGTTTCTGACTGGTTGTTCTCAATGTGGCATTATTCTCATCCTCCACTGCTAGAGAGACTTCAAGCTTTGAAA ACTATGAAGCAACAC**TGA**GATGTCCAGGATCTGTGACTGAAGACATTTCTGATTATTTCTGTCCTGGCAGCATGT TCCAGCTCTTGATGTTTTTAAACTTTTTTTAGAAGAAAAATTAAGTACAGAAAAGCCCAGATTTAAATACATTT AAAGGCATAGTTTTATCTTTGACATCTAATTTACCATCAAGTTGTAAAATTATTTGGAAAAAATACAGAACTCGTT TTATTTGTATACTTATATGGAATCTGCATGTGAGGTGTTTGAGGGCATATGTTTGAAAGAGGGAGCATCACCACA GGAATCCTTTCTGTGAGGTGGAAACAGTGGTCCTGAATCATTGTGCTCACACCTAACTTGAAATCTGGTCTTACT TTCATGCTGTTATGATTTCACCTGGTGAATCAGTGTTTTAAATAAGAAAGGTAATAGTTGGTAAGGCCAATGTTA ACAGTGATCAAGAGTTTCTCATAGTGCTTTGAAGTTAGAAATTATGTATAGGATATTTTAAATCATTGAGTTTTG GATGGCCATATTAAACACGTTTTGCTATGTTAAAAGTGGCAGAACAGGAAAGACGAATTAAAAATAACATTTTTT AAGCGACATAAGGATGAAATACTGATGAATCTCTGTGACATTACAGGGAAAAAAATATAGTTTTCTATCTCTTTC GTTTTTAAAGCTATATGTTTCACTGCTTCATATCTCTGTCCACTTTCTGAATGAGAACTTATTTTGTGCCTAGAG CTCTCACTCACTGATAATGCTTATTACCTTCTGGGCATTTATTCCAAAGTGGGATCAACTGTACGCCTTTGGTAT CTGACCATAAAGTCTTTTGCTCCGCTGACATTTGGGTGATGTCTTCACATGGAAATATAATAAAAATAAAAATCT AGTTTAATACTGCATTATTTATTTTCCTAAGGCTAAAGAGGAGCAGTCCTATGCTTTTATTCAGCATCCTTTATC TGTGACTTCATGCTCTGATAACTGCCTTTCCTTCTTGTGCCTTTGAATACAAATTTCAGTTCTGCAAAAGTG AAACATTAAACATTGCCAACGCAAATGT

707/2825 FIGURE 630

MGMWASLDALWEMPAEKRIFGAVLLFSWTVYLWETFLAQRQRRIYKTTTHVPPELGQIMDSETFEKSRLYQLDKS
TFSFWSGLYSETEGTLILLFGGIPYLWRLSGRFCGYAGFGPEYEITQSLVFLLLATLFSALTGLPWSLYNTFVIE
EKHGFNQQTLGFFMKDAIKKFVVTQCILLPVSSLLLYIIKIGGDYFFIYAWLFTLVVSLVLVTIYADYIAPLFDK
FTPLPEGKLKEEIEVMAKSIDFPLTKVYVVEGSKRSSHSNAYFYGFFKNKRIVLFDTLLEEYSVLNKDIQEDSGM
EPRNEEEGNSEEIKAKVKNKKQGCKNEEVLAVLGHELGHWKLGHTVKNIIISQMNSFLCFFLFAVLIGRKELFAA
FGFYDSQPTLIGLLIIFQFIFSPYNEVLSFCLTVLSRRFEFQADAFAKKLGKAKDLYSALIKLNKDNLGFPVSDW
LFSMWHYSHPPLLERLQALKTMKQH

708/2825 FIGURE 631

709/2825 FIGURE 632

MAELRVLVAVKRVIDYAVKIRVKPDRTGVVTDGVKHSMNPFCEIAVEEAVRLKEKKLVKEVIAVSCGPAQCQETI RTALAMGADRGIHVEVPPAEAERLGPLQVARVLAKLAEKEKVDLVLLGKQAIDDDCNQTGQMTAGFLDWPQGTFA SQVTLEGDKLKVEREIDGGLETLRLKLPAVVTADLRLNEPRYATLPNIMKAKKKKIEVIKPGDLGVDLTSKLSVI SVEDPPQRTAGVKVETTEDLVAKLKEIGRI

710/2825 FIGURE **633**

711/2825 FIGURE 634

 $\label{thm:marging} $$\operatorname{MMMKIPWGSIPVLILLLIGLIDISQAQLSCTGPPAIPGIPGIPGIPGPDGQPGTPGIKGEKGLPGLAGDHGEFG}$$ EKGDPGIPGNPGKVGPKGPMGPKGGPGAPGAPGPKGESGDYKATQKIAFSATRTINVPLRRDQTIRFDHVITNMN $$\operatorname{NNYEPRSGKFTCKVPGLYYFTYHASSRGNLCVNLMRGRERAQKVVTFCDYAYNTFQVTTGGMVLKLEQGENVFLQATDKNSLLGMEGANSIFSGFLLFPDMEA}$

712/2825 FIGURE 635A

GGACTGTGTGTGTCTGGCTGTAGCAGACGCGAGGCGCGACGAGGCGCCCGGGGGACCCGCGAGGGGCGCCGGG AGGCGGCGGCGGCCGCCAGAAGTAGCAGCAGGACCGGCGGCGGCGACGGCAGCCCTGAAATGCATTTTCCTC TCCAGCGGCC<u>ATG</u>TTAACCAGGAAACCTTCGGCCGCCGCTCCCGCCGCCTACCCGACCGGCCGAGGTGGGGACAG CGCCGTTCGTCAGCTTCAGGCTTCCCCGGGGCTCGGTGCAGGGCCCACCCGGAGCGGAGTGGGGACTGGCCCGCC CTCCCCCATCGCCCTGCCGCCTCTCCGGGCCAGCACGCTGCCGCCGCAGCCCACACGATTGGCGGCAGTAAGCA CACAATGAATGATCACCTGCATGTCGGCAGCCACGCTCACGGACAGATCCAGGTTCAACAGTTGTTTGAGGATAA CAGTAACAAGCGGACAGTGCTCACGACAACCAAATGGGCTTACAACAGTGGGCAAAACGGGCTTGCCAGTGGT GCCAGAGCGGCAGCTGGACAGCATTCATAGACGGCAGGGGAGCTCCACCTCTCTAAAGTCCATGGAAGGCATGGG GAAGGTGAAAGCCACCCCCATGACACCTGAACAAGCAATGAAGCAATACATGCAAAAACTCACAGCCTTCGAACA CCATGAGATTTTCAGCTACCCTGAAATATATTTCTTGGGTCTAAATGCTAAGAGCGCCAGGGCATGACAGGTGG GCCCAACAATGGTGGCTATGATGATGACCAGGGATCATATGTGCAGGTGCCCCACGATCACGTGGCTTACAGGTA TGAGGTCCTCAAGGTCATTGGGAAGGGGAGCTTTGGGCAGGTGGTCAAGGCCTACGATCACAAAGTCCACCAGCA CGTGGCCCTAAAGATGGTGCGGAATGAGAAGCGCTTCCACCGGCAAGCAGCGGAGGAGATCCGAATCCTGGAACA CCTGCGGAAGCAGGACAAGGATAACACAATGAATGTCATCCATATGCTGGAGAATTTCACCTTCCGCAACCACAT CTGCATGACGTTTGAGCTGAGCATGAACCTCTATGAGCTCATCAAGAAGAATAAATTCCAGGGCTTCAGTCT GCCTTTGGTTCGCAAGTTTGCCCACTCGATTCTGCAGTGCTTGGATGCTTTGCACAAAAACAGAATAATTCACTG TGACCTTAAGCCCGAGAACATTTTGTTAAAGCAGCAGGGTAGAAGCGGTATTAAAGTAATTGATTTTGGCTCCAG TTGTTACGAGCATCAGCGTGTCTACACGTACATCCAGTCGCGTTTTTACCGGGCTCCAGAAGTGATCCTTGGGGC CAGGTATGCCATTGATATGTGGAGCCTGGGCTGCATTTTAGCAGAGCTCCTGACGGGTTACCCCTCTT GCCTGGGGAAGATGAAGGGGACCAGCTGGCCTGTATGATTGAACTGTTGGGCATGCCCTCACAGAAACTGCTGGA TGCATCCAAACGAGCCAAAAATTTTGTGAGCTCCAAGGGTTATCCCCGTTACTGCACTGTCACGACTCTCTCAGA TGGCTCTGTGGTCCTAAACGGAGGCCGTTCCCGGAGGGGGGAAACTGAGGGGCCCACCGGAGAGCAGAGAGTGGGG GAACGCGCTGAAGGGGTGTGATGATCCCCTTTTCCTTGACTTCTTAAAACAGTGTTTTAGAGTGGGATCCTGCAGT GCGCATGACCCCAGGCCAGGCTTTGCGGCACCCCTGGCTGAGGAGGCGGTTGCCAAAGCCTCCCACCGGGGAGAA AACGTCAGTGAAAAGGATAACTGAGAGCACCGGTGCTATCACATCTATATCCAAGTTACCTCCACCTTCTAGCTC AGCTTCCAAACTGAGGACTAATTTGGCGCAGATGACAGATGCCAATGGGAATATTCAGCAGAGGACAGTGTTGCC $\texttt{AAAACTTGTTAGC} \underline{\textbf{TGA}} \texttt{GCTCACGTCCCCTGATGCTGGTAACCTGAAAGATACGACATTGCTGAGCCTTACTGGGT}$ TGAAAAGGAGTAGCTCAGACCTGTTTTTATTTGCTCAATAACTCTACTCATTTGTATCTTTTCAGCACTTAATTT TAATGTAAGAAAGTTGTTCATTTTGTTTTTATAAAATACATGAGGACAATGCTTTAAGTTTTTATACTTTCAGAA ACTTTTTGTGTTCTAAAAGTACAATGAGCCTTACTGTATTTAGTGTGGCAGAATAATAACATCAGTGGCAGGCCA CTGATTACTTCATGACTGCCACGCATTTACAGATTGGTGTCAAAGACATTCACTATGTTTTTATGGTTCATGTTA TATCCTCCCCAGGGTGACAGCCCCTTAAGGCCCTCTTTTCCCTCCATGCTCCAGGTCCATGCACAGGTGTAGCA TGTCCTGCTTCCGTTTTTCATAAATTAATCTGGGTGTTGGGGGTAGTGGGAGAACGGTCAGAATCAAAGTGA AAACTGCCCAGTTAGCATTCTGACATTCTAAAAGCCGGCAAAGCAGCTTTTAGTGGATAAATGGGAATGGAAACG TGTGTGTTCCTCCAAATTTTCTAGTATGATCGGTGAGCTGTTTTGTAAAGAAGCCTCATATTACAGAGTTGCTTT TGCACCTAAATTTAGAATTGTATTCCATGAACTGTTCCTCCCTTTTCTCTGCTTTTCTCCTCTCTGTTCCTCTTT AAAGAGACATTTCAGCTGTGATTATGACCATTGTTTCATATTCCAATTAAAAAAAGAACAGCAGCCTAGCTACTT AGTCACTTTGGCTGTTCAGTAAGGCCAATGTTAACAACACGTTTAGAGGAGGAAAAGTTCAACCTCAAGTTAAAT ATTGCACTGATTGTTTTTGTGGGAATGACACTTTATCTGGCAAAGTAACTGAGAGTTTGGTAAAAGAATATTTTC TTCTCTGAATAATTATTTTCACAGTGAAAATTTCAGTATTTTATCACTAATGTATGAGCAATGATCTATATC AATTTCAAGGCACGTGAAAAAAATTTTTTAGTATGTGCAATTTAATATAGAAAGATTTCTGCCTGTTTGGACAAT AGGTTTTGGGTAGTACAGATTAGGATAAGTAAGCTTATATATGCACAGAGATTATTGTATTACCTGTAAATTGAT TTACAAGTACTTAAAAGCGTGGTCCCCAGTGAGGCCAAGAAAGTTTCCGGTTAAGTTCTTTAATAATACCTAC

713/2825 FIGURE 635B

AGTTTATCTTAAGAA

714/2825 FIGURE 636

MLTRKPSAAAPAAYPTGRGGDSAVRQLQASPGLGAGPTRSGVGTGPPSPIALPPLRASNAAAAAHTIGGSKHTMN DHLHVGSHAHGQIQVQQLFEDNSNKRTVLTTQPNGLTTVGKTGLPVVPERQLDSIHRRQGSSTSLKSMEGMGKVK ATPMTPEQAMKQYMQKLTAFEHHEIFSYPEIYFLGLNAKKRQGMTGGPNNGGYDDDQGSYVQVPHDHVAYRYEVL KVIGKGSFGQVVKAYDHKVHQHVALKMVRNEKRFHRQAAEEIRILEHLRKQDKDNTMNVIHMLENFTFRNHICMT FELLSMNLYELIKKNKFQGFSLPLVRKFAHSILQCLDALHKNRIIHCDLKPENILLKQQGRSGIKVIDFGSSCYE HQRVYTYIQSRFYRAPEVILGARYGMPIDMWSLGCILAELLTGYPLLPGEDEGDQLACMIELLGMPSQKLLDASK RAKNFVSSKGYPRYCTVTTLSDGSVVLNGGRSRRGKLRGPPESREWGNALKGCDDPLFLDFLKQCLEWDPAVRMT PGQALRHPWLRRRLPKPPTGEKTSVKRITESTGAITSISKLPPPSSSASKLRTNLAQMTDANGNIQQRTVLPKLV

715/2825 FIGURE 637A

CTCGCAGCGCTTCCAGCTCCCCGCGCCCCTATGTGAGGGAGACGGGGAGGCCCGCGGCGCGCAGGGGAGGCCGAG GGCGGCGACGCCCTGAAATGCATTTTCCTCTCCAGCGGCCATGTTAACCAGGAAACCTTCGGCCGCCGCTC GGGCCACCCGGAGCGGAGTGGGGGACTGGCCCGCCCTCCCCCATCGCCCTCTCCGGGCCAGCAACGCTG GACAGATCCAGGTTCAACAGTTGTTTGAGGATAACAGTAACAAGCGGACAGTGCTCACGACACAACCAAATGGGC TTACAACAGTGGGCAAAACGGGCTTGCCAGTGGTGCCAGAGCGGCAGCTGGACAGCATTCATAGACGGCAGGGGA GCTCCACCTCTCTAAAGTCCATGGAAGGCATGGGGAAGGTGAAAGCCACCCCCATGACACCTGAACAAGCAATGA ${\tt AGCAATACATGCAAAAACTCACAGCCTTCGAACACCATGAGATTTTCAGCTACCCTGAAATATATTTCTTGGGTC}$ TAAATGCTAAGAAGCGCCAGGGCATGACAGGTGGGCCCAACAATGGTGGCTATGATGATGACCAGGGATCATATG TGCAGGTGCCCCACGATCACGTGGCTTACAGGTATGAGGTCCTCAAGGTCATTGGGAAGGGGAGCTTTGGGCAGG TGGTCAAGGCCTACGATCACAAAGTCCACCAGCACGTGGCCCTAAAGATGGTGCGGAATGAGAAGCGCTTCCACC ATATGCTGGAGAATTTCACCTTCCGCAACCACATCTGCATGACGTTTGAGCTGCTGAGCATGAACCTCTATGAGC TCATCAAGAAGAATAAATTCCAGGGCTTCAGTCTGCCTTTGGTTCGCAAGTTTGCCCACTCGATTCTGCAGTGCT TGGATGCTTTGCACAAAAACAGAATAATTCACTGTGACCTTAAGCCCGAGAACATTTTGTTAAAGCAGCAGGGTA GAAGCGGTATTAAAGTAATTGATTTTGGCTCCAGTTGTTACGAGCATCAGCGTGTCTACACGTACATCCAGTCGC GTTTTTACCGGGCTCCAGAAGTGATCCTTGGGGCCAGGTATGGCATGCCCATTGATATGTGGAGCCTGGGCTGCA TTTTAGCAGAGCTCCTGACGGGTTACCCCCTCTTGCCTGGGGAAGATGAAGGGGACCAGCTGGCCTGTATGATTG AACTGTTGGGCATGCCCTCACAGAAACTGCTGGATGCATCCAAACGAGCCAAAAATTTTGTGAGCTCCAAGGGTT ATCCCCGTTACTGCACTGTCACGACTCTCTCAGATGGCTCTGTGGTCCTAAACGGAGGCCGTTCCCGGAGGGGGA AACTGAGGGGCCCACCGGAGAGCAGAGAGTGGGGTAACGCGCTGAAGGGGTGTGATGATCCCCTTTTCCTTGACT TCTTAAAACAGTGTTTAGAGTGGGATCCTGCAGTGCGCATGACCCCAGGCCAGGCTTTGCGGCACCCCTGGCTGA GGAGGCGGTTGCCAAAGCCTCCCACCGGGGAGAAAACGTCAGTGAAAAGGATAACTGAGAGCACCGGTGCTATCA CATCTATATCCAAGTTACCTCCACCTTCTAGCTCAGCTTCCAAACTGAGGACTAATTTGGCGCAGATGACAGATG $\verb|CCAATGGGAATATTCAGCAGAGGACAGTGTTGCCAAAACTTGTTAGCTGAGCTCACGTCCCCTGATGCTGGTAAC| \\$ CTGAAAGATACGACATTGCTGAGCCTTACTGGGTTGAAAAGGAGTAGCTCAGACCTGTTTTTATTTGCTCAATAA CTCTACTCATTTGTATCTTTTCAGCACTTAATTTTAATGTAAGAAAGTTGTTCATTTTGTTTTTATAAAATACAT GAGGACAATGCTTTAAGTTTTTATACTTTCAGAAACTTTTTGTGTTCTAAAAGTACAATGAGCCTTACTGTATTT AGTGTGGCAGAATAATAACATCAGTGGCAGGCCACTGATTACTTCATGACTGCCACGCATTTACAGATTGGTGTC AAAGACATTCACTATGTTTTTATGGTTCATGTTATATCCTCCCCAGGGTGACAGCCCCTTAAGGCCCTCCTTTTC CCTCCATGCTCCAGGTCCATGCACAGGTGTAGCATGTCCTGCTTCCGTTTTTCATAAATTAATCTGGGTGTTGGG GGTAGTGGGAGGAGCGGTCAGAATCAAAGTGACATTCTAAGAAAAACTGTACCTTAGAGATTTTCCTCTAGTG CTCAAACAAATACAAAATAAGATCCCCAAGGTTTAAACTGCCCAGTTAGCATTCTGACATTCTAAAAGCCGGCAA AGCAGCTTTTAGTGGATAAATGGGAATGGAAACGTGTGTTCCTCCAAATTTTCTAGTATGATCGGTGAGCTGT TTTGTAAAGAAGCCTCATATTACAGAGTTGCTTTTGCACCTAAATTTAGAATTGTATTCCATGAACTGTTCCTCC $\tt CTTTTCTCTGCTTTTCTCCTCTTTTTAATACCACACGTCTGTTGCATTTAGTTTGTCTTCTT$ CCTTCAGCTGTGTATCCCAGACTGTTAATACAGAAAAGAGACATTTCAGCTGTGATTATGACCATTGTTTCATAT TCCAATTAAAAAAAGAACAGCAGCCTAGCTACTTAAGGTGGGGATTTCCATAGTTCCAAAGAAGATTTAGCAGAT AAGAAAGAGGGTTGAAAATCCTCTGGACGAACAGAAGTCACTTTGGCTGTTCAGTAAGGCCAATGTTAACAACAC GTTTAGAGGAGGAAAAGTTCAACCTCAAGTTAAATGGTTTGACTTATTCTTCGTATCATTAGAAGAACCCCAGAG CAAAGTAACTGAGAGTTTGGTAAAAGAATATTTTCTTCTCTGAATAATAATTATTTTCACAGTGAAAATTTCAGT ATTTTATCACTAATGTATGAGCAATGATCTATATCAATTTCAAGGCACGTGAAAAAAATTTTTTAGTATGTGCAA

716/2825 FIGURE 637B

TTTAATATAGAAAGATTTCTGCCTGTTTGGACAATAGGTTTTGGGTAGTAAGATTAGGATAAGTTAATAT ATGCACAGAGATTATTGTATTACCTGTAAATTGATTTACAAGTACTTAAAAAGCGTGGTCCCCAGTGAGGCCAAGA TTTAATTTAGGCTTCGTTGGTTGATGGTGGAAAAAATGCTCAGGAAATATTTCAGATATTTGCCAAAAAACCAG CTGTGTTTAGAAATTATAGCTTCTTTTCCCTTAGTCAAATTTTTTAGCATATTATACACATTTCTGTGTAATCTG TAGAATTTAAAGATCTGTATATTAGATTTTGGCTTAAAGGCATGAGAAGTATAAGACTTGGTTTGGTGGCTTTGT AAGACCACCAGCCTCTTAATGATGGTTAGCTTCTTTAGGTCATTAAATCAATAAAAACATATAATGCTGTTTTGC TCTTCTAATGCTCCTCTTCCATTTCCAGTTATCTTCACATTTACATTTAAATATACAAACCTGAGCCCGCCATTA TTAATTTCCCTATAAAATGACGATACATGTGAACATTTATAAATGGACTAATACTGCTTGTCTTTCCCCCACCGC CACAAGAGCTGCCACATCTCAGCATTTAGTAATAGAGCTGCTTTAATAAAATTCTAGTTTGATTGTCATGTCAAA AAAAGAAAAATGTTGCATCTTTGTGATTTTAAAACATAAATTAATGAAGGCTCTGATAGGCTATTAGGAGTTGGC TTGGAAACAGTTTTTGGTCTCACAGGTTACCATTGTTTGGGGATGTCTGAGCTGTTTTCAGATCTAGGAATAGCA ${\tt CAGTGTTGTCTTTGGCAGTCTCATTTGGCTCTGTTTCTTGCACCACCAGCATGTTCATTACCACTTAAAT}$ ATATTGCTACAGCAGTGGAACAACAGAGTGGTGCAAGACACTGTAGATTAACGGTAGAGGAGAAATTGTGCCCTT ATTCTAGTCAGTAAGAATGGAACCCATCTCTGCAAAGATACATCTGTCTTAAATATCTAGTTACAGGCCTTAATA GAAACCATAAGGCATGACTCATCTTCAGGCACTGAAAAAAGATAACCATCAGGTAGTGTTACACAAGGACTTCCT TAACACTAGACAAAAATCAACTGTATTTGTAAAAATTTACCTCAAACCATTTAATTTTATAGTGTGATTAATCCC AGGGCATTTGGTATGAACCAAAGTGCATTCCTTTTATATGTGCCTGGCTCTAGTAAGGATGGCCAGGGATTTTTA CAATTTGGGTGCAAGGCACTTAAGCCACTTTTAAACTTAATGGGTGGTTTGGGGTCGTGTTAAATGACCCCATCA GAATGTTAGAAAACACTTTAGGCATCAGTAGCATTGGGCCATATTGGAATCCTAAAGTGTGAATTATTTTAAGGA GAGCATTCATTTTTGTAATTTTTTCATCAAAAATATTTCTGGTAAGCAGAAGACTTTTTAAAAAAACTGATCTG GTCTCGGTAAAGGTTTTAATATTGCCCAACATAATGCTGTAATAGCATTAAAAAAAGTATTTGTGAACTCTGTTT GTTCTGTCTAGGCAGTGGCTTGGGTTTTTATCGAGCAACAACTTAGACACGTGACTGTAATATGCTGCAACTGTG TACAGCTGATGACAGGAGTAAGACTGTTTAGTGAATATCTGTTAAATTTTATTGTTGTGGCCAGAGATAATTTCA GAATAAAATTTTAATGTCCTACCTTACTTCTCCCCTTTCTAACTATAATTTAACTCCTGATCTATTTCTGGTA TTATCCTTTGTCAATTAGCCTGGAGAGGGTTTAGAATGCAAAATGGATAGCTCTATATCAGGGTCTTGAGAAGTT AAAATAATTCATTCTACTAGTTTGTTCATAGCAATACTTTATTAGTTCAATATAAGTATGCAGATTCCAAGTGGA AAAACAAAGGTTTTAGTAAGTAGTTCTTGCTTTTCCCAGGATATTCTATTCCTTCACCTGTCAGATTTTTATGTT AACTTTTTTATATATAGCCTCTGCTGTTCTTTATTATTGCTAGAGCTTCATATCTTCTTTTATTTTAACCTTCA CAATGATAGTTAAGCTGGGGGAGCAGAACCTGTCAATTATTCCCCACCAGTCTTCATTCTTTTCTCTGCACAAGT TCTGGTAAATTATTCTAATGTGCTCTAACCAGTTCCACCCAATGTTTTTAATGCTTATGAGTTTTGCAGTTTTTG TACTTGGTGGTCTCTGTGGTTCACATTTTTTTGTGTTGTAGTGTCTCCTGCCTCGGTTGGCTCAGAAAATAAGGC AAGCAGATGCTCTAGTAATTCGTCAGACATTGCAGGGATATTGTGTAGTCAGATATTACCCTCTTGTGGAAAGAA CTACCTCACATCATTATTTATTTCCCTTCTGTTACCAACAGCCAAGGAATTACTTAGTGTGGCTCCCTGCATCAA TACTGGGATATGCTTAAACAAGGGAATGCCATAAGAGTTCCCAATTGCCTCGTCATAGCCTGGGCCATAGATTTT TGTTACTGCTAATCTTGCTTCTTAAAGTTCACACCCAGTGCAAAAAACCCAATCAGCAAACTAACCCCAAAATCC AATATATTTAGAAATGTAAGTGTTAAGAGATGTGCATTATGTACAAAATTGAAAATTGGTGCTAAAGTGGCAATG TCAATTTAAAATTTCTTGTCCAGATCTGACTGACTGACTCAGGAGATTATAGTTCCTACTCATTCTCTTT

717/2825 FIGURE 637C

TATCAGATCTTTCAAAAGCGCTTTTTAAAATTGATCAATGTGCAATTCTGTTTGAGTCTCTACAGTCCTATCCCT TTTGGAATGAACAGCTACACAAATAAATATTCTTGGAACTTCGAAGTTGTCTTCAAACTAGCTCTAGAAAATGTC CCTAGTTGACATTAGTGTTGGTCTGTTAGAAGGGGAAATTGATTTGACTGCTTCATGTTTTGAAAAGAGCATTAA GAGGGATTTGAGGAAGGTATATGTGGCTTTCTTTTTTCTTAAGTTTGAATTACACTTGATTTCCTTTGGGTTATT AGGCAGATAAACCCTTGTCATTAGTAATACTTAGCACTGTCCAAAATGAAAAATGACTGCCAGTGTGTTGCACAT GCTATGGTCATATCCTTAATATCTGCGGTACATTTCATATGTATATATGGGGTGGGAGCATAATTGCCATTCCCA TGTGTCTCAAGGAAGCTTAATGAGGAAACTAATGAGTTAATATTAACTCTTCTGAAGAAAGCTGACATTTTAGGA GTATTAAGTCATCTGTCGTTAAGGAGCAGCAAGAATATATTATGATTGTATCACATGTTCCAGAAGAGCATTACC CCTTACATAGAAAGCTCCTTGGAGATTTCATGATGTTGGATGAACATCAGTTTATCCTTATACATCCCTATGAGC TATAATTATCCTCATTTGATACTTGAGGAAACTGAAGTGACTTGCTCCAAAGTGACTACAAAAACATTGCAGTTT GAGGCTTAGGTTGTAATCAGGTAATTTTGGTCTTGGACAGTAAGGGGAAAATCCATAATACATAAAACACAAAAGT TTAGAAAGGGGGGAAGTTGAGCTAGCAATGGGCATTTCTATTATTTAAGTTACATATCAGTTTCCAGGAATATT TTTCAAATGGGACAAACTAAAAAGTTGAGGACTAGAGCATCGTAGTGTCTAAGTGCACCTAATAACTTAATGCAT GTGCACACCCTCAGTTAATTTGTAAGAGAGTGACTTCTCATTGTTATTTGTGGAGAGGCTAATTATAGTAGCT TCATTCTTTATTTTCTGTGTTCTTAAATTTTTTTTTACATTTGAAAGTATGAAAATACTATTTTTGACACTTTAC TGATACTCAGGGATTAAAAGTTAAATTTTACTGACTGTAGCAGCAGGTAAATCTCTTAAATTTACTCAGGTTTCC AATTTTAAAATACCAATTTGTAAATAAACCAATTTTACAAACTAAAATATTGTGTCTTTCCTTGCTTTTTATCCC TATTTGCAAAGCCAAAAGCCCCTGAAAAGCCCCCAAATCATTTAAGTAAAGCTTACTGAATTGTTTTCAATTGTTTT

718/2825 FIGURE 638

MLTRKPSAAAPAAYPTGRGGDSAVRQLQASPGLGAGATRSGVGTGPPSPIALPPLRASNAAAAAHTIGGSKHTMN DHLHVGSHAHGQIQVQQLFEDNSNKRTVLTTQPNGLTTVGKTGLPVVPERQLDSIHRRQGSSTSLKSMEGMGKVK ATPMTPEQAMKQYMQKLTAFEHHEIFSYPEIYFLGLNAKKRQGMTGGPNNGGYDDDQGSYVQVPHDHVAYRYEVL KVIGKGSFGQVVKAYDHKVHQHVALKMVRNEKRFHRQAAEEIRILEHLRKQDKDNTMNVIHMLENFTFRNHICMT FELLSMNLYELIKKNKFQGFSLPLVRKFAHSILQCLDALHKNRIIHCDLKPENILLKQQGRSGIKVIDFGSSCYE HQRVYTYIQSRFYRAPEVILGARYGMPIDMWSLGCILAELLTGYPLLPGEDEGDQLACMIELLGMPSQKLLDASK RAKNFVSSKGYPRYCTVTTLSDGSVVLNGGRSRRGKLRGPPESREWGNALKGCDDPLFLDFLKQCLEWDPAVRMT PGQALRHPWLRRRLPKPPTGEKTSVKRITESTGAITSISKLPPPSSSASKLRTNLAQMTDANGNIQQRTVLPKLV

719/2825 **FIGURE 639**

GGCACGAGGGTAGCTTTCCAACATAAAGTGGAGGTTTCAACACAGGAGACTTTAAGCAAGTTCCAGTGTGTCTAT ATTTGGTCTGGCTGATCGGCTGGCCTTCCCCGCTCACGTTAGCAGACAGCTCTGCCCTAGTGGGCGCT ${\tt TAGCCTGCGACGCCGAGAGGGATG} {\tt TCTAACAAGCTTCTTTCTCCCCACCCCCATTCAGTTGTTCTCAGGTC}$ TGAATTCAAAATGGCCTCATCTCCTGCTGTCCTTCGAGCGTCCCGGCTGTACCAATGGAGCCTGAAGAGTTCGGC GCAGTTCCTGGGGTCTCCACAGCTGAGGCAGGTTGGTCAGATCATTAGGGTTCCTGCTCGGATGGCGGCGACGCT GATCCTGGAGCCTGCGGGCCGCTGCTGGGACGAACCGGTGCGAATCGCCGTGCGCGGCCTAGCCCCGGAGCA GCCGGTCACGCTGCGCGCGTCCCTGCGCGACGAGAAGGGCGCGCTTTTCCAGGCCCACGCGCGCTACCGCGCCGA CACTCTTGGCGAGCTGGACCTGGAGCGCGCGCCGCGCTGGGCGGCAGCTTCGCGGGGCTTGAGCCCATGGGGCT GCTCTGGGCCTTGGAGCCCGAGAAACCTTTGGTGCGGCTGGTGAAGCGCGACGTGCGAACGCCCTTGGCCGTGGA GCTGGAGGTGCTGGATGGCCACGACCCCGACCCCGGCCGCTGCTGTGCCAGACGCGGCACGAGCGCTACTTCCT CCCGCCGGGGTGCGCGCGAGCCGGTGCGCGTGGGCCGGGTGCGAGGCACGCTCTTCCTGCCGCCAGAACCTGG GAAGGGTTTTGCTGTGATGGCTCTGGCTTATTATAACTATGAAGACCTCCCCAAGACCATGGAGACGCTCCATCT GGAGTACTTTGAAGAAGCCATGAACTACTTGCTCAGTCATCCCGAGGTAAAAGGTCCAGGAGTTGGGCTGCTTGG AATTTCCAAAGGGGGTGAGCTCTGCCTTTCCATGGCCTCTTTCCTGAAGGGCATCACGGCTGCTGTCGTCATCAA CGGCTCTGTGGCCAATGTTGGGGGAACCTTACGCTACAAGGGCGAGACCCTGCCCCCTGTGGGCGTCAACAGAAA TCGCATCAAGGTGACCAAAGATGGCTATGCAGACATTGTGGATGTCCTGAACAGCCCTTTGGAAGGACCTGACCA GAAGAGCTTCATTCCTGTGGAAAGGGCAGAGAGCACCTTCCTGTTCCTGGTAGGTCAGGATGACCACAACTGGAA GAGTGAGTTCTATGCTAATGAGGCCTGTAAACGCTTGCAGGCCCATGGGAGGAGAAAGCCCCAGATCATCTGTTA TCCTATTATCTGGGGAGGGGAGCCCAGGGCTCATGTCATGGCTCAGGTGGATGCTTGGAAACAACTCCAGACTTT CTTCCACAAACACTTGGGTGGCCACGAGGGGACAATCCCATCAAAAGTG**TAA**ATTTTATTTGATCATGTGGCCTC

720/2825 FIGURE 640

MSNKLLSPHPHSVVLRSEFKMASSPAVLRASRLYQWSLKSSAQFLGSPQLRQVGQIIRVPARMAATLILEPAGRC CWDEPVRIAVRGLAPEQPVTLRASLRDEKGALFQAHARYRADTLGELDLERAPALGGSFAGLEPMGLLWALEPEK PLVRLVKRDVRTPLAVELEVLDGHDPDPGRLLCQTRHERYFLPPGVRREPVRVGRVRGTLFLPPEPGPFPGIVDM FGTGGGLLEYRASLLAGKGFAVMALAYYNYEDLPKTMETLHLEYFEEAMNYLLSHPEVKGPGVGLLGISKGGELC LSMASFLKGITAAVVINGSVANVGGTLRYKGETLPPVGVNRNRIKVTKDGYADIVDVLNSPLEGPDQKSFIPVER AESTFLFLVGQDDHNWKSEFYANEACKRLQAHGRRKPQIICYPETGHYIEPPYFPLCRASLHALVGSPIIWGGEP RAHVMAQVDAWKQLQTFFHKHLGGHEGTIPSKV

721/2825 FIGURE 641

 ${\tt TCCTGGGGCCCAGCGCGGGTGGCTGCGGGGCCCCTCGGGCTGCGTGGGGAGGGGCTTCCGCCCCTGTTGTCAT}$ TGCTCCTGCAGCCTTTTCGCTGGGACTGCGCGACACCGCCCCCGACCGGGTGCCCGCTGTGTGCCAGGCCGGGT $\texttt{GCTGGGCACGGTCCCGCGAGTGCCCTATAAGGACTGCCAGGCAATA} \underline{\textbf{ATG}} \texttt{AAGGTTCTTTTACTGAAGGATGCGAA}$ GGAAGATGACTGTGGCCAGGATCCGTATATCAGGGAATTAGGATTATATGGACTTGAAGCCACTTTGATCCCTGT TTTATCGTTTGAGTTTTTGTCTCTTCCCAGTTTCTCTGAGAAGCTTTCTCATCCTGAAGATTACGGGGGGACTCAT TTTTACCAGCCCCAGAGCAGTGGAAGCAGCAGAGTTATGTTTGGAGCAAAACAATAAAACTGAAGTCTGGGAAAG GTCTCTGAAAGAAAATGGAATGCCAAGTCAGTGTATGTGGTTGGAAATGCTACTGCTTCTCTAGTGAGTAAAAT TGGCCTGGATACAGAAGGAGAAACCTGTGGAAATGCAGAAAAGCTTGCAGAATATATTTGTTCCAGGGAGTCCTC AGCACTGCCTCTTCTATTTCCCTGTGGAAACCTCAAAAGAGAAATCCTGCCAAAAGCGCTCAAGGACAAAGGGAT TGCCATGGAAAGCATAACTGTGTATCAGACAGTTGCACACCCAGGAATCCAAGGGAACCTGAACAGCTACTATTC $\tt CCAGCAGGGGGTTCCAGCCAGCATCACATTTTTTAGTCCCTCTGGCCTCACATACAGTCTCAAGCACATTCAGGA$ GTTATCTGGTGACAATATCGATCAAATTAAGTTTGCAGCCATCGGCCCCACTACGGCTCGCGCGCTGGCCGCCCA GGGCCTTCCTGTAAGCTGCACTGCAGAGAGCCCCACGCCACAGCCCTGGCCACTGGCATCAGGAAGGCTCTCCA GGAGCCAGGCATCGGCAAGGGCTCTCGGGAGCTGCTGCCGTCAGACTCCTGCCTCAAGCCTGAGTGGAAGCACCT GAGGACCGGGGATCGGGACCTGACCTGGGGCTGGCCTCAGGCCCACGTGCACGTGACTGCCCTCTGTGGAAGCCA GCTT

722/2825 **FIGURE 642**

MKVLLLKDAKEDDCGQDPYIRELGLYGLEATLIPVLSFEFLSLPSFSEKLSHPEDYGGLIFTSPRAVEAAELCLE QNNKTEVWERSLKEKWNAKSVYVVGNATASLVSKIGLDTEGETCGNAEKLAEYICSRESSALPLLFPCGNLKREI LPKALKDKGIAMESITVYQTVAHPGIQGNLNSYYSQQGVPASITFFSPSGLTYSLKHIQELSGDNIDQIKFAAIG PTTARALAAQGLPVSCTAESPTPQALATGIRKALQPHGCC

723/2825 FIGURE 643

TGCGGGCTCCAGCCGCAGCCTTAGCTTCGGCTCCCGGCTTGGGTGGCGCGGCCGTGCCCTCGTTTTGGCCTCCGA ACGCGGCTCGAATGGCAAGCCAAAATTCCTTCCGGATAGAATATGATACCTTTGGTGAACTAAAGGTGCCAAATG ATAAGTATTATGGCGCCCAGACCGTGAGATCTACGATGAACTTTAAGATTGGAGGTGTGACAGAACGCATGCCAA CCCCAGTTATTAAAGCTTTTGGCATCTTGAAGCGAGCGGCCGCTGAAGTAAACCAGGATTATGGTCTTGATCCAA AGATTGCTAATGCAATAATGAAGGCAGCAGATGAGGTAGCTGAAGGTAAATTAAATGATCATTTTCCTCTCGTGG TAGGAGGTGAACTTGGCAGCAAGATACCTGTGCATCCCAACGATCATGTTAATAAAAGCCAGAGCTCAAATGATA CTTTTCCCACAGCAATGCACATTGCTGCTGCAATAGAAGTTCATGAAGTACTGTTACCAGGACTACAGAAGTTAC ATGATGCTCTTGATGCAAAATCCAAAGAGTTTGCACAGATCATCAAGATTGGACGTACTCATACTCAGGATGCTG TTCCACTTACTCTTGGGCAGGAATTTAGTGGTTATGTTCAACAAGTAAAATATGCAATGACAAGAATAAAAGCTG $\verb|CCATGCCAAGAATCTATGAGCTCGCAGCTGGAGGCACTGCTGTTGGTACAGGTTTAAATACTAGAATTGGCTTTG|\\$ CAGAAAAGGTTGCTGCAAAAGTGGCTGCACTTACAGGCTTGCCTTTTGTCACTGCTCCGAATAAATTTGAAGCTC ATGATATTCGATTTTTGGGTTCTGGTCCTCGGTCAGGTCTGGGAGAATTGATCTTGCCTGAAAATGAACCAGGAA GCAGTATCATGCCAGGCAAGGTGAACCCTACTCAGTGTGAAGCAATGACCATGGTTGCAGCCCAAGTCATGGGGA ACCATGTTGCTGTCACTGTCGGAGGCAGCAATGGACATTTTTGAGTTGAATGTTTTCAAGCCAATGATGATTAAAA ATGTGTTACACTCAGCCAGGCTGCTGGGGGATGCTTCAGTTTCCTTTACAGAAAACTGCGTGGTGGGAATCCAGG CCAATACAGAAAGGATCAACAAGCTGATGAATGAGTCTCTAATGTTGGTGACAGCTCTCAATCCTCATATAGGGT ATGACAAGGCAGCAAAGATTGCTAAGACAGCACAAAAATGGATCAACCTTAAAGGAAACTGCTATCGAACTTG GCTATCTCACAGCAGAGCAGTTTGACGAATGGGTAAAACCTAAGGACATGCTGGGTCCAAAG**TGA**TTTACATAAA TTTATAATGAAAATAAACATGTATAAAAATTTAAAAAAACAGACTCCCATTTCTTAAAAAACGGATAAGTTTGAAAG GAAACTGCTATTGAACTTAAGCATCTCTAGCAGAGCAATTTGATCAGTATATAAAACCCTAGGATGTGCTAGGTC TAAGATGGATTAAACAAGTATAAAATAAAATACATTTATAAAATAAAAGGAAAACAGACTTAAAA

724/2825 FIGURE 644

MYRALRLLARSRPLVRAPAAALASAPGLGGAAVPSFWPPNAARMASQNSFRIEYDTFGELKVPNDKYYGAQTVRS
TMNFKIGGVTERMPTPVIKAFGILKRAAAEVNQDYGLDPKIANAIMKAADEVAEGKLNDHFPLVVWQTGSGTQTN
MNVNEVISNRAIEMLGGELGSKIPVHPNDHVNKSQSSNDTFPTAMHIAAAIEVHEVLLPGLQKLHDALDAKSKEF
AQIIKIGRTHTQDAVPLTLGQEFSGYVQQVKYAMTRIKAAMPRIYELAAGGTAVGTGLNTRIGFAEKVAAKVAAL
TGLPFVTAPNKFEALAAHDALVELSGAMNTTACSLMKIANDIRFLGSGPRSGLGELILPENEPGSSIMPGKVNPT
QCEAMTMVAAQVMGNHVAVTVGGSNGHFELNVFKPMMIKNVLHSARLLGDASVSFTENCVVGIQANTERINKLMN
ESLMLVTALNPHIGYDKAAKIAKTAHKNGSTLKETAIELGYLTAEQFDEWVKPKDMLGPK

725/2825 FIGURE 645A

CGTCCACCGTGGAGTCTCTCCTTGCTTTGGGTCCACTGAGCCCCACACATTGTTGAGTGTCTGATTGTCTCCTTG ATGATTCTGGCCTCCTTGATGGTGAATACAGGAACACTTTCAGATAAATTACAATAGAGAGGAGTCAGCTTATTT ATGTGCCAGGTCCAGAACTAGAAGAAACTTGGGTGTAGGTGAGATCATAGGAACAGTCCCTGCCCCAGCTGAACA TCAGGAAGCCAGACTGGGAGCACATGCCGTGGCTGACTAGGACTCCAGCAGGGACCTGGGGTTCCATCAGATCAG TGTAAAGCGATGGTTTCCCAAATGAGACCTCTCCAGAGATGGTTCATTCCACCCCGCAATGGCCACCAGAAACAT TGTGCTGACCAGAGGGCTTCACTGCCCCAAAACCCCAAAATCACACTCCAGGATGAGAAACCTAAAAGTCTATCTT GATGAGGCTTCATAGCTGGAAACCACCCCTCATGGATCCACAGGCTGCATTTGATGAAAGGAGACTCCAGGAAGT CATAAGAGAGGTGACAGGCAGGCATCCCTGGGGACCTGGGCCTGTGGCACGTGAAGAAACACCCAAGAGAGCAC GAAGTCCCAATGCCATGACCAGATATTTCGGTGCCAGGCATGCTTCTGGGTCCCAGCAAAAGACACACAAATCCG TGTCCTTGGGGACCCACAGTCTAGTGACCTAGGGCTGGCCGGGTCGCACGCTTCTTTTCAAGGGCTCGAAAGCCT CTGCATGGATGCAACTTTGGGGGAAAAGTAACCCTAACCCTCTGCTTCTCATCCTCCCCTCTTCTGTGTATAT TCCGAAGCCTCGGAAACCTGCCAGTCAGTGAGCGAGTGCAGCTCCCCCACCTCTGTCAGCTCGGGCTCCACCATG GGTGCCTGGGTGTCCACAGAGAAGGTGACCGCCCGGGTGGCAGCCACAGCGGCCCCACTCTCCCTGGTCCCCCTG CCTGCTGCTCAGACAGCCCTCACAGCCGGGGCAACCTGGAAGCTCAGAATCGACACCAAGAGTGGGGCTCCTCTT GGGGACAGAGGTGGGACAAGGCTGAGAGCATTTTCTAGAATGAGTGCCTGGCTGCTGGACAATGACCACATGGT TGTCTCAAGGGAGGGAAGGGGTATGGGGAATTTGGAGGTGTGAAGGCTTTCTCCCAGACCAGGTGTTGCGTGCC TGTCCATCCTCCCTCCCTTCCCGAGCCACCCACCAGACCGTTGGATGAGCCATGTCACTGTGTCAGAGGCTG GATTTTGGAAACCTAGAATGAACAGATTCATTTGAAGATGCTTTGGAATTTTTAAATTTGCATAATGAAATGAGC AAATCACTATCACCATTAAATGAGGCTTCATTAGTTACATTATCAAAAACCATTGACAAGGCCACAAATTGAGGG CACTGATCAATTTCCAAACTTCTAAAACGTAGGTCAAACATAGATGCTTATTTGCTGTCAAACTCATGTGCATTC AAATATTCAGGTTTCCCCTCCCTTGAATGTCAATGCCATTTTGTATCTCCGCACTCATCCTGTTATATTATTTT TTTTCCTTTCCCCCCCTTTTTTTGTTTGTTTCCAGTTGTCTAACGGGTTTTCTCACTATAGTTTATCAAGTGAG TGGAAGGACTGGGCTAAGCCTGGGCCCTATGACCAGCCTCTGGTGAACACCCTGCAGCGCCGCAAAGAGAAGCGA GAACCGGACCCCAACGGGGGAGGACCCACTACCGCCAGCGGCCCACCTGCAGCAGCTGAGGAGGCTCAGAGACCA CGGAGCATGACTGTATCGGCTGCCACCAGGCCTGGTGAGGAGATGGAGGGCTTGTGAGGAGCTGGCCCTGGCCCTG TCTCGGGGCCTGCAGCTGGACACCCAGAGGAGCAGCCGGGACTCGCTTCAGTGCTCCAGCGGCTACAGCACCCAG ACAACCACCCCTGCTGCTCTGAGGACACCATCCCTTCCCAAGTTTCAGATTATGATTATTTCTCTGTAAGTGGT GACCAGGAGGCAGATCAGCAGGAGTTCGACAAGTCCTCCACCATTCCAAGAAACAGCGACATCAGCCAGTCCTAC CGACGGATGTTCCAAGCCAAGCGTCCAGCCTCAACTGCTGGCCTCCCCACCACCCTGGGACCTGCTATGGTCACT CCAGGGGTTGCAACTATCCGACGGACCCCTTCCACCAAGCCTTCTGTCCGCCGGGGAACCATTGGAGCTGGTCCC ATCCCCATCAAGACACCCGTGATCCCTGTCAAGACCCCAACCGTCCCAGACCTCCCAGGGGTGTTGCCAGCCCCT CCAGATGGGCCAGAAGAGCGGGGGGAGCACAGCCCTGAGTCGCCATCTGTGGGTGAGGGCCCCCAAGGTGTCACC AGCATGCCCTCCTCAATGTGGAGCGGCCAAGCTTCCGTTAACCCTCCACTTCCAGGCCCGAAGCCCAGTATCCCT GAGGAGCACAGACAGGCAATTCCAGAAAGTGAAGCTGAAGACCAGGAACGGGAACCCCCAAGTGCCACTGTCTCC CCAGGCCAGATTCCAGAGAGTGACCCTGCAGACCTGAGCCCAAGGGATACTCCACAAGGAGAAGACATGCTGAAC GCCATCCGAAGGGGCGTGAAACTGAAGAAGACCACGACAAACGATCGCTCAGCCCCTCGCTTTTCT**TAG**GTTCAC AAGAAATGCGCCGGTGGGGAATGAACTGTTTCATTAATAAAACCTAATTTGTCTTGATCCATTCCACTCTATAAT AAAACAAAAGATTTTGTAGGCAACTCGGAATATAGCTCTTTTGAAAGTACTCGACACCTTTAGATAAGAATTAAA

726/2825 FIGURE 645B

TCTTAGTTTCCCTTTTGATTTTCTGAAGGTGCCAAATTCCATTTAACTTTTTTACAAGTCTTTGTAAAATTTTA AATGCATAAAGGGGGTTGGGGCAGGGGAACCACGAAGTAGTTAATTTTAGAAAAGGATTTACTATACTTCACTCT TCTTTTTTTTCCCCACAAGCTTTTGTAGATGCATTGTAGTAGTCTAGCTTAGAAGCAAATGCAAGTTATTTTAA TGTACAAACTAAATGGGTAAGAGGTAAAATCTTCATTTAAATATACTATGTTCTGGATGAAAAGAGCAGGAGTAA GGAGGGGTACATCGTCAACATAGCCGATCCTGTTACATTTAAGAGTAGCCTCGTAGGTTGAATTTCTTCTGGTAG AGTCGTAGAATCTCCCACTTCAGTTTCTCGTTGATTGTACTCACCTTTATGGAATCCAAATACATCCAAAAGGGT AAGGCAGTTTTAAAAATGTGAAAACATTTAAAAATGATAATAGCAGGGAATTCTTAGATTATAGTAAATGCCTTT TACTTAACTGTGCCCAGCAGGCTGGGTGCGTTAAAAAGCCCAAGTATTTTGAAAAAACTCGAACAGATTTGACAA GGGTAGCCAGCTTGGAGTCTAGCAACTTGCCAATGTGTTTACCAATCTGGGGGGCTTGTTTTCTTTTCTTCTTTTC AAATAAATGGCAGTTAACTGGCTTTACAGTAAACATTGAAGAGAGGGGGATTTGTTTATTGTCACTGGGAATCTG ACCACTATACTGTCCTTTTTTTGTATTCTGGGTAATGTTTTTTTGGAAAAGATTTGTCTTTTCTAAGTGGAAGTTA AATTTGTTATACTGCCCATCCCCTAAAGCCAACAGAGATTTGTAGATTTAAAGGGATCACATTTGAAGACAATAG TGTTTAAGAAAGCAAGCACTCCCTTAGCAGTCAGGTCATAACAGGGCACATTTCTGACCGAACCCTCTCAAGGC AGAGGAGGAGTTTGGTGGGTTTCATACACCCTGCAGATTCCTGTTGGCTCTAACCCTCAATTACCTAATCTTATG CTTTAACACATAACTGCATTGGATGTGAGAGTAACGTACCGTATGGTCATTGTTCTATATATTAACATTGAACAC TGCTGCGATTGCTCAAGGACATTTTATGTTACGGCTTTAAAGCAAAGGCATGATTATTAGAAACTATTTAAGCTT TTTTCTTTGAAAACAAGCTTCTTTTACAGAATATAAACAACAGTAGTGCCTGTGGTTTAGCCCACCAATCTTGA TGACTAAAAGTAGCTGATGCATTGTGCATATGATGCTTGAGATGGTTTTTGCAAAAGCAGAAATCGCTGCAAGGT TTTCTAACAGTAAATTATTGTGCTTTAGTTGCTAGTTTGTACTGAGAGTTGACCTCTCCCTGTGCAGTTTTTTGT TCTAAACTTGTATAACAATTGTGTAATGTGTCTCCCTCCTACATTGTAACAATTGCTTCAGCCTACGTTAT AAATAAAGAACCACTAGATT

727/2825 FIGURE 646

 $\label{thm:continuous} MFPSSQIPSWKDWAKPGPYDQPLVNTLQRRKEKREPDPNGGGPTTASGPPAAAEEAQRPRSMTVSAATRPGEEME \\ ACEELALALSRGLQLDTQRSSRDSLQCSSGYSTQTTTPCCSEDTIPSQVSDYDYFSVSGDQEADQQEFDKSSTIP \\ RNSDISQSYRRMFQAKRPASTAGLPTTLGPAMVTPGVATIRRTPSTKPSVRRGTIGAGPIPIKTPVIPVKTPTVP \\ DLPGVLPAPPDGPEERGEHSPESPSVGEGPQGVTSMPSSMWSGQASVNPPLPGPKPSIPEEHRQAIPESEAEDQE \\ REPPSATVSPGQIPESDPADLSPRDTPQGEDMLNAIRRGVKLKKTTTNDRSAPRFS$

728/2825 FIGURE 647

 $\verb|CCGATTCCTGGCTTTTGCAAGGCTGTGGTCGGTGGTCATCAGTGCTCTTGACCCAGGTCCAGCGAGCCTTTTCCC| \\$ TGGTGTTGCAGCTGTTGTTGTACCGCCGCCGTCGCCGCCGTCGCCGCCTCTCTGCGGGGGTCATGCTGCTTCC GCCTCTTCCCGGTTCCGGGCTCAGGGCTCGTTCTGGTCTAGTCCTGGGAGCTGTGCGGTCTTATGCATTGG AACTTAATTTGACAGATTCAGAAAATGCCACTTGCCTTTATGCAAAATGGCAGATGAATTTCACAGTACGCTATG AAACTACAAATAAAACTTATAAAACTGTAACCATTTCAGACCATGGCACTGTGACATATAATGGAAGCATTTGTG GGGATGATCAGAATGGTCCCAAAATAGCAGTGCAGTTCGGACCTGGCTTTTCCTGGATTGCGAATTTTACCAAGG CAGCATCTACTTATTCAATTGACAGCGTCTCATTTTCCTACAACACTGGTGATAACACAACATTTCCTGATGCTG AAGATAAAGGAATTCTTACTGTTGATGAACTTTTTGGCCATCAGAATTCCATTGAATGACCTTTTTAGATGCAATA GTTTATCAACTTTGGAAAAGAATGATGTTGTCCAACACTACTGGGATGTTCTTGTACAAGCTTTTGTCCAAAATG TGCCATCTCCTACTACAACACCTACTCCAAAGGAAAAACCAGAAGCTGGAACCTATTCAGTTAATAATGGCAATG ATACTTGTCTGCTGGCTACCATGGGGCTGCAGCTGAACATCACTCAGGATAAGGTTGCTTCAGTTATTAACATCA ACCCCAATACAACTCACTCCACAGGCAGCTGCCGTTCTCACACTGCTCTACTTAGACTCAATAGCAGCACCATTA TGGTTAATGGCTCCGTTTTCAGCATTGCAAATAACAATCTCAGCTACTGGGATGCCCCCCTGGGAAGTTCTTATA TGTGCAACAAAGAGCAGACTGTTTCAGTGTCTGGAGCATTTCAGATAAATACCTTTGATCTAAGGGTTCAGCCTT TCAATGTGACACAAGGAAAGTATTCTACAGCTCAAGACTGCAGTGCAGATGACGACAACTTCCTTGTGCCCATAG CGGTGGGAGCTGCCTTGGCAGGAGTACTTATTCTAGTGTTGCTGGCTTATTTTATTGGTCTCAAGCACCATCATG CTGGATATGAGCAATTT**TAG**AATCTGCAACCTGATTGATTATAAAAAATACATGCAAATAACAAGATTTTCTTA CCTCTCAGTTGTTGAAACACTTTGCTTCTTAAAATTGATATGTTGAAACTTTAATTCTTTTATCAATCCCAGCAT TTTGAGATCAGTCTTTATTAATAAAACCTGTTCTCTTTAATCAGCTTAAAAATCCAAAGTGTCATATTTACTGGTC $\tt CTGGAGACAAACTTGTTCAAAAGAACATCAACGTGCAATGTTTTAAGGTCTATCTTAAGAAGCCCTGGCCAAATT$ TTGATCCTAACCTTGAAGTATGCCTTGAACTTATTAACATGGCCATTATAAGAATAAAATATGTAGTTGTGTCTT AATGGAATTAATAAATGTCATTTCACTACTGGTGTTCTGTTTTCAATGTATAAGGACTATAGTGATTTAAACTCA TCAATGTGCCTTTGCATAAAGTTGATTAAATAAATATTGATGTGGTATAAATGCCCATCAGATATGCT

729/2825 FIGURE 648

MVCFRLFPVPGSGLVLVCLVLGAVRSYALELNLTDSENATCLYAKWQMNFTVRYETTNKTYKTVTISDHGTVTYN GSICGDDQNGPKIAVQFGPGFSWIANFTKAASTYSIDSVSFSYNTGDNTTFPDAEDKGILTVDELLAIRIPLNDL FRCNSLSTLEKNDVVQHYWDVLVQAFVQNGTVSTNEFLCDKDKTSTVAPTIHTTVPSPTTTPTPKEKPEAGTYSV NNGNDTCLLATMGLQLNITQDKVASVININPNTTHSTGSCRSHTALLRLNSSTIKYLDFVFAVKNENRFYLKEVN ISMYLVNGSVFSIANNNLSYWDAPLGSSYMCNKEQTVSVSGAFQINTFDLRVQPFNVTQGKYSTAQECSLDDDTI LIPIIVGAGLSGLIIVIVIAYVIGRRKSYAGYQTL

730/2825 **FIGURE 649A**

AAGAAGCAAAAGACGGAGAACCAGCAGAAATCCACCAATGTAGTCTATCAGGCCCACCATGTGAGCAGGAATAAG AGAGGGCAAGTGGTTGGAACAAGGGGTGGGTTCCGAGGATGTACCGTGTGGCTAACAGGTCTCTCTGGTGCTGGA AAAACAACGATAAGTTTTGCCCTGGAGGAGTACCTTGTCTCCCATGCCATCCCTTGTTACTCCCTGGATGGGGAC AATGTCCGTCATGGCCTTAACAGAAATCTCGGATTCTCTCCTGGGGACAGAGAGAAAATATCCGCCGGATTGCT GAGGTGGCTAAGCTGTTTGCTGATGCTGGTCTGGTCTGCATTACCAGCTTTATTTCTCCATTCGCAAAGGATCGT GAGAATGCCCGCAAAATACATGAATCAGCAGGGCTGCCATTCTTTGAAATATTTGTAGATGCACCTCTAAATATT TGTGAAAGCAGAGACGTAAAAGGCCTCTATAAAAAGGCCAGAGCTGGGGAGATTAAAGGATTTACAGGTATTGAT CAGGTAGTGGAACTTCTGCAAGAGCAGAACATTGTACCCTATACTATAATCAAAGATATCCACGAACTCTTTGTG CCGGAAAACAAACTTGACCACGTCCGAGCTGAGGCTGAAACTCTCCCTTCATTATCAATTACTAAGCTGGATCTC CAGTGGGTCCAGGTTTTGAGCGAAGGCTGGGCCACTCCCCTCAAAGGTTTCATGCGGGAGAAGGAGTACTTACAG GTTATGCACTTTGACACCCTGCTAGATGATGGCGTGATCAACATGAGCATCCCCATTGTACTGCCCGTCTCTGCA GAGGATAAGACACGGCTGGAAGGGTGCAGCAAGTTTGTCCTGGCACATGGTGGACGGAGGGTAGCTATCTTACGA GACGCTGAATTCTATGAACACAGAAAAGAGGAACGCTGTTCCCGTGTTTGGGGGGACAACATGTACAAAACACCCC GTGTTTGCATTCCAGTTGCGCAATCCTGTCCACAATGGCCATGCCCTGTTGATGCAGGACACTCGCCGCAGGCTC $\verb|CTAGAGAGGGGCTACAAGCACCCGGTCCTACTACACCCTCTGGGCGGCTGGACCAAGGATGACGATGTGCCT|\\$ $\verb|CTAGACTGGCGGATGAAGCACGCGGCTGTGCTCGAGGAAGGGGTCCTGGATCCCAAGTCAACCATTGTTGCC| \\$ ATCTTTCCGTCTCCCATGTTATATGCTGGCCCCACAGAGGTCCAGTGGCACTGCAGGTCCCGGATGATTGCGGGT GCCAATTTCTACATTGTGGGGAGGGACCCTGCAGGAATGCCCCATCCTGAAACCAAGAAGGATCTGTATGAACCC ACTCATGGGGGCAAGGTCTTGAGCATGGCCCCTGGCCTCACCTCTGTGGAAATCATTCCATTCCGAGTGGCTGCC TACAACAAAGCCAAAAAAGCCATGGACTTCTATGATCTAGCAAGGCACAATGAGTTTGACTTCATCTCAGGAACT CGAATGAGGAAGCTCGCCCGGGAAGGAGAATCCCCCAGATGGCTTCATGGCCCCCAAAGCATGGAAGGTCCTG ${\tt ACAGATTATTACAGGTCCCTGGAGAAGAAC{ extbf{TAA}}{ ext{GCCTTTGGCTCCAGAGTTTCTTTCTGAAGTGCTCTTTGATTA}}$ CCTTTTCTATTTTTATGATTAGATGCTTTGTATTAAATTGCTTCCTCAATGATGCATTTTAACTTTTATAATGAA GACCAAATCTTAGCAGGTAAAAGCAATATTCTTATACATTTCATAATAAAATTAGCTCTATGTATTTTCTACTGC TATTTTCCAGCATGTCTTGACAACCTGTACTCTTCCAATGTCATTTATCAGTTGTAAAATATATCAGATTGTGTC CTCTTCTGTACAATTGACAAAAAAAATTTTTTTTTTCTCACTCTAAAAGAGGTGTGGCTCACATCAAGATTCTTC CTGATATTTTACCTCATGCTGTACAAGCCTTAATGTGTAATCATATCTTACGTGTTGAAGACCTGACTGGAGAAA CAAAATGTGCAATAACGTGAATTTTATCTTAGAGATCTGTGCAGCCTAGATTTTACCTCATGCTGTACAAAGCCT TAATGTTGTAATCATATCTTACGTGTTGAGACCTGACTGGAGAAACAAATGTGCAATAACGTGAATTTTATCTT AGAGATCTGTGCAGCCTATTTTCTGTCACAAAAGTTATATTGTCTAATAAGAGAAGTCTTAATGGCCTCTGTGAA TAATGTAACTCAGTTACACGGTGACTTTTAATAGCATACAGTGATTTGATGAAAGGACGTCAAACAATGTGGCGA TGTCGTGGAAAGTTATCTTTCCCGCTCTTTGCTGTGGTCATTGTGTCTTGCAGAAAGGATGGCCCTGATGCAGCA GCAGCGCCAGCTGTAATAAAAAATAATTCACACTATCAGACTAGCAAGGCACTAGAACTGGAAAAGACCACAGAA GAGCACCGTAACAAATGTAAATTTGCCATTATTAGGAAAGTGCTGGTGGCAGTGAAGAAGCACCCAGGCCACTT GACTCCCAGTCTGGTGCCCTGTCTACACCAGACAACACAGGAGCTGGGTCAGATTCCCCTCAGCTGCTTAACAAA GTTCCTCGAACAGAAAGTGCTTACAAAGCTGCCTTCTCGGATACTGAAAGGTCGAGTTTTCTGAACTGCACTGAT TTTATTGCAGTTGAAAAACCCAAAGCTATTCCAAAGATTTCAAGCTGTTCTGAGACATCTTCTGATGGCTTTACT TCCTGAGAGGCAATGTTTTTACTTTATGCATAATTCATTGTTGCCAAGGAATAAAGTGAAGAAACAGCACCTTTT TAATATATAGGTCTCTCTGGAAGAGACCTAAATTTAGAAAGAGAAAACTGTGACAATTTTCATATTCTCATTCTT AAAAAACACTAATCTTAACTAACAAAAGTTCTTTTGAGAATAAGTTACACACAATGGCCACAGCAGTTTGTCTTT

731/2825 **FIGURE 649B**

732/2825 FIGURE 650

MSGIKKQKTENQQKSTNVVYQAHHVSRNKRGQVVGTRGGFRGCTVWLTGLSGAGKTTISFALEEYLVSHAIPCYS LDGDNVRHGLNRNLGFSPGDREENIRRIAEVAKLFADAGLVCITSFISPFAKDRENARKIHESAGLPFFEIFVDA PLNICESRDVKGLYKKARAGEIKGFTGIDSDYEKPETPERVLKTNLSTVSDCVHQVVELLQEQNIVPYTIIKDIH ELFVPENKLDHVRAEAETLPSLSITKLDLQWVQVLSEGWATPLKGFMREKEYLQVMHFDTLLDDGVINMSIPIVL PVSAEDKTRLEGCSKFVLAHGGRRVAILRDAEFYEHRKEERCSRVWGTTCTKHPHIKMVMESGDWLVGGDLQVLE KIRWNDGLDQYRLTPLELKQKCKEMNADAVFAFQLRNPVHNGHALLMQDTRRRLLERGYKHPVLLLHPLGGWTKD DDVPLDWRMKQHAAVLEEGVLDPKSTIVAIFPSPMLYAGPTEVQWHCRSRMIAGANFYIVGRDPAGMPHPETKKD LYEPTHGGKVLSMAPGLTSVEIIPFRVAAYNKAKKAMDFYDLARHNEFDFISGTRMRKLAREGENPPDGFMAPKA WKVLTDYYRSLEKN

733/2825 FIGURE 651

GGAGAGAGGACCTATTTCTACCTAAGGACATTCCCGGAAGGCAATGGGTTTCAAACAATATCCTGAAGAGACTCA TCTCGGGGAACTAAGCAGGTGGTAATCAGAGAACACAGAGCCCCCGGAAGAATTTT**ATG**GCATTTCAGGCAAGCC ACAGGCCAGCCTGGGGAAAAAGCAGGAAGAAAACTGGCAATACGAGGGCCCAACCCAAAAGTTATTCCTGAAGA GAAACAACGTGTCAGCACCAGATGGGCCTTCAGACCCCAGCATCTCCGCGAGCAGTGAGCAAAGCGGGGCACAGC AGCCTCCCGGTTTACAGGTTGAAAGGATTGTTGACAAAAGGAAAAATAAAAAAGGGAAGACAGAGTATTTGGTTC GGTGGAAAGGCTATGACAGCGAGGACGACACTTGGGAGCCGGAACAGCACCTCGTGAACTGTGAGGAATACATCC ATGCTAGGAAACAATCTCCAGATCCACCAACAGCAACTTTTCTAAGACCTCTCCTAAGGCACTCGTGATTGGGA CCAGCCGGAAGAACATGGACCTAGCGAAGTCAGGTATCAAGATCCTCGTGCCTAAAAGCCCCGTTAAGAGCAGGA CCGCAGTGGACGCCTTTCAGAGCGAGAGCCCTGAGAAACTGGACCCCGTCGAGCAGGGTCAGGAGGACACAGTGG GGCCCAGGATACACCCACTAGTGCCTCAGGTGCCCGGCCCTGTGACTGCAGCCATGGCCACAGGCTTAGCTGTTA GAGTGACTGCCAGCAAAAGGAAATTTATTGACGACAGAAGAGACCAGCCTTTTGACAAGCGATTGCGTTTCAGCG TGAGGCAAACAGAAAGTGCCTACAGATACAGAGATATTGTGGTCAGGAAGCAGGATGGCTTCACCCACATCTTGT TATCCACAAAGTCCTCAGAGAATAACTCACTAAATCCAGAGGTAATGAGAGAAGTCCAGAGTGCTCTGAGCACGG ${\tt CCGCTGCCGATGACAGCTGGTACTGCTCAGCGCCGTTGGCAGCGTCTTCTGTTGTGGACTTGACTTTATTT}$ ATTTTATACGACGTCTGACAGATGACAGGAAAAGAGAAAGCACTAAAATGGCAGAAGCTATCAGAAACTTCGTGA ATACTTTCATTCAATTTAAGAAGCCCATTATTGTAGCAGTCAATGGCCCAGCCATTGGTCTAGGAGCATCTATAT TGCCTCTTTGCGATGTGGTTTGGGCTAATGAAAAGGCTTGGTTTCAAACACCCTATACCACCTTCGGACAGAGTC CAGATGGCTGTTCTACCGTTATGTTTCCCAAGATAATGGGAGGAGCATCTGCAAACGAGATGCTGCTCAGTGGAC GGAAGCTGACAGCGCAGGAGGCGTGTGGCAAGGGCCTGGTCTCCCAGGTGTTTTGGCCCGGGACGTTCACTCAGG AAGTGATGGTTCGCATTAAGGAGCTTGCCTCGTGCAATCCAGTTGTGCTTGAGGAATCCAAAGCCCTCGTGCGCT GCAACATGAAGATGGAGCTGGAGCAGGCCAACGAGAGGGGAGTGTGAGGTGCTGAAGAAAATCTGGGGCTCGGCCC AGGGGATGGACTCCATGTTAAAGTACTTGCAGAGGAAGATCGATGAGTTC**TGA**GTGTCGGGCTGCCCACTGGTGA CACCGGGATCGGGCTGAGCAGGAGAACATCACCGGCTCCAGTTCCCCTGATCCATTCTCACAGCCTGAAACAAGC TAACTTTAAAATAACTACAAAGCTTCTTTGTCVAAACGTCATTATTTTATACTTATATACACGCAGGTGTA AAAGTATAAAGGTGAGCACTAGACTGCTCTTAGAAGCTCTAATTTTTGTTTTCTTTGGCTAGTACTGTATAAAAA AGAACACAGAATCTAAGGGGGTGTTAGCCAGCCTCGCCTCCCTGCCCACGTAGAGACACAGAGTGATGTGAGGC GTTGGCTTTTTCTCCAAGAAGGTACAGATACCTCAGATTCGGGAAACTCAAAATCAAAAGACTTAGCTTCTAGGA TAAATACTTCTGATGAAAAATCCGCTGAGGAGCATACCCCAAACCAGACATATGCTTAGGATTCATGCTGAGATA TCAATTGGTTTCCCCTTCTTTTAAAATACGTCCAGTTCTTACCCAGTTAACATGAAGAAACCACTGTCTCTAGA AGAAAGCTTGTTTTGCAGTATTAGTGAATCACTGAATAGCTTAAGTATGACTATCTAAGTTATAAGTTAGTCTTT AGTGGGTTTTAAATAGTTTTTCTGACCCTTCTGAAAAATAACTACATAAGTGCTTCTTGTTGCTGGGTGAGAAAT TAAATGCAAAAACTCCTTTCAAAAAAAAAA

734/2825 FIGURE 652

MAFQASHRPAWGKSRKKNWQYEGPTQKLFLKRNNVSAPDGPSDPSISASSEQSGAQQPPGLQVERIVDKRKNKKG KTEYLVRWKGYDSEDDTWEPEQHLVNCEEYIHDFNRRHTEKQKESTLTRTNRTSPNNARKQISRSTNSNFSKTSP KALVIGKDHESKNSQLFAASQKFRKNTAPSLSSRKNMDLAKSGIKILVPKSPVKSRTAVDGFQSESPEKLDPVEQ GQEDTVAPEVAAEKPVGALLGPGAERARMGSRPRIHPLVPQVPGPVTAAMATGLAVNGKGTSPFMDALTANGTTN IQTSVTGVTASKRKFIDDRRDQPFDKRLRFSVRQTESAYRYRDIVVRKQDGFTHILLSTKSSENNSLNPEVMREV QSALSTAAADDSKLVLLSAVGSVFCCGLDFIYFIRRLTDDRKRESTKMAEAIRNFVNTFIQFKKPIIVAVNGPAI GLGASILPLCDVVWANEKAWFQTPYTTFGQSPDGCSTVMFPKIMGGASANEMLLSGRKLTAQEACGKGLVSQVFW PGTFTQEVMVRIKELASCNPVVLEESKALVRCNMKMELEQANERECEVLKKIWGSAQGMDSMLKYLQRKIDEF

735/2825 FIGURE 653

736/2825 FIGURE 654

 ${\tt MIKLFSLKQQKKEEESAGGTKGSSKKASAAQLRIQKDINELNLPKTCDISFSDPDDLLNFKLVICPDEGFYKSGKFVFSFKVGQGYPHDPFKVKCETMVYHPNIDLEGNVCLNILREDWKPVLTINSIIYGLQYLFLEPNPEDPLNKEAAEVLQNNRRLFEQNVQRSMRGGYIGSTYFERCLK$

737/2825 FIGURE 655A

GGAGCCCTGGGCGCGGGGGGGGGTGTCAGGTGGTTGCGGAGCTGGTAAGAATCATATTCTAAGAACTCAGCCAC TCAGGTATCCACCATGGTGCTGGGTCCTGAACAGAAGATGTCAGATGACAGTGTTTCTGGAGATCATGGGGAGTC TGCCAGTCTTGGTAACATCAACCCTGCCTATAGTAATCCCTCTCTTTCACAGTCCCCTGGGGACTCAGAGGAGTA CTTCGCCACTTACTTTAATGAGAAGATCTCCATTCCTGAGGAGGAGTACTCTTGTTTTAGCTTTCGTAAACTCTG GGCTTTCACCGGACCAGGTTTTCTTATGAGCATTGCCTACCTGGATCCAGGAAATATTGAATCCGATTTGCAGTC TGGAGCAGTGGCTGGATTTAAGTTGCTCTGGATCCTTCTGTTGGCCACCCTTGTGGGGCTGCTGCTCCAGCGGCT TGCAGCTAGACTGGGAGTGGTTACTGGGCTGCATCTTGCTGAAGTATGTCACCGTCAGTATCCCAAGGTCCCACG AGTCATCCTGTGGCTGATGGTTGGCTATCATCGGCTCAGACATGCAAGAAGTCATTGGCTCAGCCATTGC TATCAATCTTCTGTCTGTAGGAAGAATTCCTCTGTGGGGTGGCGTTCTCATCACCATTGCAGATACTTTTGTATT TCTCTTCTTGGACAAATATGGCTTGCGGAAGCTAGAAGCATTTTTTGGCTTTCTCATCACTATTATGGCCCTCAC ATTTGGATATGAGTATGTTACAGTGAAACCCAGCCAGAGCCAGGTACTCAAGGGCATGTTCGTACCATCCTGTTC AGGCTGTCGCACTCCACAGATTGAACAGGCTGTGGGCATCGTGGGAGCTGTCATCATGCCACAACATGTACCT GCATTCTGCCTTAGTCAAGTCTAGACAGGTAAACCGGAACAATAAGCAGGAAGTTCGAGAAGCCAATAAGTACTT TTTCATTGAATCCTGCATTGCACTCTTTGTTTCCTTCATCATCAATGTCTTTGTTGTCTCAGTCTTTGCTGAAGC ATTTTTTGGGAAAACCAACGAGCAGGTGGTTGAAGTCTGTACAAATACCAGCAGTCCTCATGCTGGCCTCTTTCC TAAAGATAACTCGACACTGGCTGTGGACATCTACAAAGGGGGTGTTGTGCTGGGATGTTACTTTGGGCCTGCTGC ACTCTACATTTGGGCAGTGGGGATCCTGGCTGCAGGACAGAGCTCCACCATGACAGGAACCTATTCTGGCCAGTT TGTCATGGAGGGATTCCTGAACCTAAAGTGGTCACGCTTTGCCCGAGTGGTTCTGACTCGCTCTATTGCCATCAT GAGCTTACAGCTTCCCTTTGCTCTCATACCCATCCTCACATTTACGAGCTTGCGGCCAGTAATGAGTGACTTTGC CAATGGACTAGGCTGGCGGATTGCAGGAGGAATCTTGGTCCTTATCATCTGTTCCATCAATATGTACTTTGTAGT GGTTTATGTCCGGGACCTAGGGCATGTGGCATTATATGTGGTGGCTGCTGTGGTCAGCGTGGCTTATCTGGGCTT TAGCCATCAGAGCCAGTGTGTTTCTATGGTTTACTGTGTGAACATAGCCAAAAGTATGTGCCGTTGCACAGACTG TGTTTATGACTCAACCGTTGGTTGGAAAAGACTTTGTTTCATGTGTATTTGAAAGATGGAATTATTTTTTCCTTC ATTCTTAAGTAGTTGCCCAAGGGCCAGCTCAGTTTATCCTTCGGAGAGACAAGGATATGCATGATTCTTAACCAG GCTATATGTTAAAAAAAATTGGAAAATGCAATACATTTTTTATTATACAAACTACAGAATGAGTATGCAAGTTT TACCAAATTATCAACTAGAATAGCTTCATCCATATGAAATATAAAATGAAGACACCTAGCTCTATCAGGCTTA GGATTCTTTGAACTTATTTCCACTTTAATTTCTCAGTGGAAGTTAAGAGGGGGTGAGAAAACAAAGAAGGGGGAAAA ACTGACAACTAACAAAACCAGCACCACATCGCTAGGTGGTGCTTACTAATTACCTTCTCAGGATTTTCCTCAGAT ${\tt TCTTGAGCACATGTGGTTGTAAAACCTTAACTTTCTTCTCCAGGAGGGTGGTGATAGAAACAGATGGTAGTATT}$ TATGAACTGATGTTCTCGTGAAATGTTGAGGGTGGGGAGAAAAGACTTTAAGGGAGGAGAGCCATCTATTTTGTT $\verb|CCTAAAGCCACCTCTCAGCAGAATCGTCATGTTTTTCTGATGCACCGCTCTGCTTCATGCCCAAGATGACTTGCG| \\$ AGGCAATCTCAGGAGCTGTGGACTTAACCGTTGCAAAGCACACTGTCTTTCTCAGCGTTCTCTGCAAGTCAGTAG GTGTTAGTATGGTTGCAAAGTTCACTGTCTCAGCAAAGTTGAACTGGGCTACCTCTCTACAGCTGTTTCCTCAGA GGGAAAAATCTTGAGACCATGGTGGAGCTCTGGAGTCAGAGGAAATGGGTGTCTTCAGCACAAAGCTGCTGCTTT TACTTCAGCCACTTCTGACATTTTTACATACCGAGCCTGAGATTGTGTGATTATCTCAAATCAAATCACTTTGAT GGAGATAAATAATCAAAACTGTTTTATAGTCATTGATTTGGTGAGAACAGTAATGGAAAAATGGTGTTGAAGGACT TCTCATTTTTGGAGCTTTCCTTCCAGAGTCCTGGCTGATTGGTGTTCGCTGTTCATCTGAGCCCCCAAAAGCATT AACCATTCCTCTTCATATCTGCCTCTTCCCCTTACCATCGTAATTCTCCAAACTGGTCATAAAGGCACTCTGTGA

738/2825 FIGURE 655B

739/2825 FIGURE 656

MVLGPEQKMSDDSVSGDHGESASLGNINPAYSNPSLSQSPGDSEEYFATYFNEKISIPEEEYSCFSFRKLWAFTG PGFLMSIAYLDPGNIESDLQSGAVAGFKLLWILLLATLVGLLLQRLAARLGVVTGLHLAEVCHRQYPKVPRVILW LMVELAIIGSDMQEVIGSAIAINLLSVGRIPLWGGVLITIADTFVFLFLDKYGLRKLEAFFGFLITIMALTFGYE YVTVKPSQSQVLKGMFVPSCSGCRTPQIEQAVGIVGAVIMPHNMYLHSALVKSRQVNRNNKQEVREANKYFFIES CIALFVSFIINVFVVSVFAEAFFGKTNEQVVEVCTNTSSPHAGLFPKDNSTLAVDIYKGGVVLGCYFGPAALYIW AVGILAAGQSSTMTGTYSGQFVMEGFLNLKWSRFARVVLTRSIAIIPTLLVAVFQDVEHLTGMNDFLNVLQSLQL PFALIPILTFTSLRPVMSDFANGLGWRIAGGILVLIICSINMYFVVVYVRDLGHVALYVVAAVVSVAYLGFVFYL GWQCLIALGMSFLDCGHTVSISKGLLTEEATRGYVK

740/2825 FIGURE 657

741/2825 FIGURE 658

 ${\tt MTASVLRSISPALRPTSGLLGTWQTQLRETHQRASLLSFWELIPMRSEPLRKKKKVDPKKDQEAKERLKRKIRKLEKATQELIPIEDFITPLKFLDKARERPQVELTFEETERRALLLKKWSLYKQQEHKMERDTIRAMLEAQQEALEELQLESPKLHAEAIKRDPNLFPFEKEGPHYTPPIPNYQPPEGRYNDITKVYTQVEFKR$

742/2825 FIGURE 659A

GCTGCGGGAGTCCGAGCCGGAACCACCCAAGTAGCTGCCCTTTCCTCTTCTGTCATCTCACCGCCCCACCACA GACCGCGTTCCCCGAGGAAACCGGCCGCCCACGCCCGGAGCATCCTCCCCTGTTGAGCGGGCGCTGACGGACCCG GCGGCATGATGCGGCTGCGAGGCTCGGGGATGCTGCGGGGACCTGCTCCTGCGGTCGCCCGGCGGCGTGAGCGCGA GCTCTCCTTCGGAGATCTTGCAGGAGCTGGGCAAGGGGAGCACGCATCCGCAGCCCGGGGTGTCGCCACCCGCTG CCCCGGCGGCCCCGAGGACGGCCCCGGGGAGACGGACGCGTTTGGCAACAGCGAGGGCAAAGAGCTGG TGGCCTCAGGTGAAAATAAAATAAAACAGGGTCTGTTACCTAGCTTGGAAGATTTGCTGTTCTATACAATTGCTG AAGGACAAGAGAAAATACCTGTTCATAAATTTATTACAGCACTCAAATCTACAGGATTGCGAACGTCTGATCCCA GGTTGAAAGAGTGTATGGATATGTTAAGATTAACTCTTCAAACAACATCAGATGGTGTCATGCTAGACAAAGATC TTTTTAAAAAATGTGTTCAGAGCAACATTGTTTTGTTGACACAAGCATTTAGAAGAAAGCTTGTGATTCCTGACT TTATGTCTTTTACCTCACACATTGATGAGTTATATGAAAGTGCTAAAAAAGCAGTCTGGAGGAAAGGTTGCAGATT ATATTCCTCAACTGGCCAAATTCAGTCCCGATTTGTGGGGTGTGTCTGTTTGTACAGTAGATGGACAGAGGCATT CTACTGGAGATACCAAAGTTCCCTTCTGTCTTCAGTCCTGTGTAAAACCTTTGAAATATGCCATTGCTGTTAATG ATCTTGGAACTGAATATGTGCATCGATATGTTGGAAAAGAGCCGAGTGGACTAAGATTCAACAAACTATTTTTGA ATGAAGATGATAAACCACATAATCCTATGGTAAATGCTGGAGCAATTGTTGTGACTTCACTAATAAAGCAAGGAG TAAATAATGCTGAAAAATTTGACTATGTCATGCAGTTTTTGAATAAGATGGCTGGTAATGAATATGTTGGATTCA GTAATGCAACGTTTCAGTCTGAAAGAGAAAGTGGAGATCGAAATTTTTGCAATAGGATATTACTTAAAAGAAAAGA AGTGCTTTCCAGAAGGCACAGACATGGTTGGTATATTAGACTTCTACTTCCAGCTGTGCTCCATTGAAGTGACTT GTGAATCAGCCAGTGTGATGGCTGCGACACTGGCTAATGGTGGTTTCTGCCCAATTACTGGTGAAAGAGTACTGA GCCCTGAAGCAGTTCGAAATACATTGAGTTTGATGCATTCCTGTGGCATGTATGACTTCTCAGGGCAGTTTGCTT TCCATGTTGGTCTTCCTGCAAAATCTGGAGTTGCTGGGGGGCATTCTTTTAGTTGTCCCCAATGTTATGGGTATGA TGTGCTGGTCTCCTCTGGATAAGATGGGCAACAGTGTTAAGGGAATTCACTTTTGTCACGATCTTGTTTCTC AAAGGGTAAAGTCAGTGATAAATCTTTTGTTTGCTGCATATACTGGAGATGTGTCTGCACTTCGAAGATTTGCTT TGTCAGCTATGGACATGGAACAGCGGGACTATGATTCTAGAACAGCACTCCATGTAGCTGCTGCAGAGGGTCATG TTGAAGTTGTTAAATTTTTGCTGGAAGCCTGCAAAGTAAACCCTTTCCCCAAGGACAGGTGGAATAACACTCCCA TGGATGAAGCACTGCACTTTGGACACCATGATGTATTTAAAATTCTCCAAGAATACCAAGTCCAGTACACACCTC AAGGAGATTCTGACAACGGGAAGGAAAATCAAACCGTCCATAAGAATCTTGATGGATTGTTG**TAA**TGGTCTCAAA TCCCAAGATTTAAATCACTTACCTATTTAATTGTGGAAAAATGATTATGAAGAACATGTGTATTTCTATCTGGTAG TGATGTATATTTTACATTTGTCATTTCAGTGTTACTGGAGTTTTCTTCATTGTGCACACAGGACAAATCTGATCT CTTTGGGAAAAATAGAAATAAAACAATCTCCCTCCATAATGTGAGCAATATTACCTCGTGCATTGTATAATTTG TATGGTGATGATCTGCTGATATGCATTTATAAAGTAAGCTCTGTTGTACAGTCTGTCCAAATGGGTCAAGGTTGC CTTTAGAAGCAAATAGTGTGATTTTCAAGACTTCAAATACAAATTTAGTTTAAGTGTTTGAACAACTATATGCAC TTACGGTTGTGTTTTAAAATGTCTCTCTCTCCCCCTAGCTTCATGATGTGACTCTTAAAAAACTATAATAGTTA ACAACTGTTAGTAAGATAGACCAATTCTGATTAGACTTTATCAGGGAATCTGTTTAAGATATGTTTGGTGACCAA AACGTATGTGTGAATGTATATATGCTTTTGAAAAATTTTCCTTTTTCTATATCCCCTTAGTCCAGCCTCTCT TCTCAGACATTTAGCTATCTGCCTCTTTCCTTTAGCTGGGAAAGTGAGAGCTGGCATACTATGCAGTTTTTATGT TTTCCATAGTAAGTCAGAAAATGCCTCCTATTTCTGGCATCAGAACTTTGCCATTTGTCTACAGAAGACGAACCA GAGACAAAATTACTAAGTATAAATTAGTCAAGTTTATCAGTCTAAAAAAGCGAAGGGATGTGCAACTGCAGCTCTT TAAGAAGTTTTTTTTTTTTAGCTTCTAGGGTAAAGATAAATTCAGAAATGCTCTAAGCTACCAAAGTTATTCTGAA AGTATGGGAACTGCTACAACTAACAAACATTTGTTTCCAAGCCTGTCATTAAGAGTCTGCATCAAGAGATTTGTC TTTAATAATAAGAAAAGGCCATTTCATTTTAAATTGTGACCTATAATTCTTTGTCTTGGGTTGGTAATTCAGGA

743/2825 FIGURE 659B

AAATGGACTTCTCTGAAGCTGTGTTTAGTGAAATGAGCTCAAGTACATGAATGTTAGTTGTTATCACATACAGCA CAGCAGCCTCCAGGTGCTTTCATTTTCACTTCCAGTCTAAGCCAGTGGCTCCTGCCACTGCCCTCCCATTACCTA GATGGCACCTCCTTTGGTGAAACCACGGCCAATGTTCCTTAGCTGCACCAGGCCCGAAGCTGTTCCCATGCTTGA GCTTCCATGGGGAGGATGCTGAGTGAGCAGTTTCCTACGCCGTGGATCTAGCAAGCCATGGAGACAGGTAGCATT AGATAACTTTATTCAAAGAGCAGCCCGCTTTGTGTGACTAAAATGAAACAAGACAGTTGAATTGTGTGACTTGAA GATTACCAATGATTTTGAGGCTTTTCTATAATAAAAAGAGGTTCTAACCATTATTTGGGAACAAAGAGAGTTTTC TATTTATGACTATGTGCCGATTCCTGCTTGGGCTGTTTGCTGTTGGCTGGTAATAATATATTTGATTTAAATGCT GTTGACTGTGCTATTAACTGCTGCCGTCAGTAAACTCCAAAGATCTTTTTGTTTTGGCTTTAGTATCATATGTGC TTTTTCTGTATCCTGAGCGCTCTATATGATCATGTTAATTTAAAGCTTTATACACATTGTTGTTTTTTGCTGGTCT CATCTTTGGTAATATGCTATACCCCACTGCTGCCCGACACTGCCCTTTAGCTGCAGAGCTGGATTAGCTGTTGAC CATTTGATGCTGTTCTGTCTGGCAGGGACTGAATGACCTGATGTCAGATTTAGATTCTTCCTGGGGATTACAC AGCTATGAATGTATTTGCTTCTAAAACCTCCCAAAGTGAATCTAATCTTAAAACTACAAGTTGTAAGTATTCTGA

744/2825 FIGURE 660

MMRLRGSGMLRDLLLRSPAGVSATLRRAQPLVTLCRRPRGGGRPAAGPAAAARLHPWWGGGGWPAEPLARGLSSS PSEILQELGKGSTHPQPGVSPPAAPAAPGPKDGPGETDAFGNSEGKELVASGENKIKQGLLPSLEDLLFYTIAEG QEKIPVHKFITALKSTGLRTSDPRLKECMDMLRLTLQTTSDGVMLDKDLFKKCVQSNIVLLTQAFRRKLVIPDFM SFTSHIDELYESAKKQSGGKVADYIPQLAKFSPDLWGVSVCTVDGQRHSTGDTKVPFCLQSCVKPLKYAIAVNDL GTEYVHRYVGKEPSGLRFNKLFLNEDDKPHNPMVNAGAIVVTSLIKQGVNNAEKFDYVMQFLNKMAGNEYVGFSN ATFQSERESGDRNFAIGYYLKEKKCFPEGTDMVGILDFYFQLCSIEVTCESASVMAATLANGGFCPITGERVLSP EAVRNTLSLMHSCGMYDFSGQFAFHVGLPAKSGVAGGILLVVPNVMGMMCWSPPLDKMGNSVKGIHFCHDLVSLC NFHNYDNLRHFAKKLDPRREGGDQRVKSVINLLFAAYTGDVSALRRFALSAMDMEQRDYDSRTALHVAAAEGHVE VVKFLLEACKVNPFPKDRWNNTPMDEALHFGHHDVFKILQEYQVQYTPQGDSDNGKENQTVHKNLDGLL

745/2825 FIGURE 661

746/2825 FIGURE 662

MGAAARTLRLALGLLLLATLLRPADACSCSPVHPQQAFCNADVVIRAKAVSEKEVDSGNDIYGNPIKRIQYEIKQ IKMFKGPEKDIEFIYTAPSSAVCGVSLDVGGKKEYLIAGKAEGDGKMHITLCDFIVPWDTLSTTQKKSLNHRYQM GCECKITRCPMIPCYISSPDECLWMDWVTEKNINGHQAKFFACIKRSDGSCAWYRGAAPPKQEFLDIEDP

747/2825 FIGURE 663

GAATTCGGCACGACGCGGCCCAGAGGCCAGGACATTCCGCGCGTGGACCAGCCGGGCCAGGGCGATCCTG TTGACAGGATGGGTGCAGCGAACTTTCCAGAGCACCCAGGCAGCTACGGCTTCCTCCCGGAACTCCTGTGCAGCT GACGACAAAGCCACTGAGCCTCTGCCCAAGGACTGCCCTGTCTCTTACAACGAATGGGACCCCTTAGAGGAA GTGATAGTGGGCAGAGCAGAAAACGCCTGTGTTCCACCGTTCACCATCGAGGTGAAGGCCAACACATATGAAAAG TACTGGCCATTTTACCAGAAGCAAGGAGGGCATTATTTTCCCAAAGATCATTTGAAAAAGGCTGTTGCTGAAATT GAAGAAATGTGCAATATTTTAAAAACGGAAGGAGTGACAGTAAGGAGGCCTGACCCCATTGACTGGTCATTGAAG ${\tt TATAAAACTCCTGATTTTGAGTCTACGGGTTTATACAGTGCAATGCCTCGAGACATCCTGATAGTTGTGGGCAAT}$ GAGATTATCGAGGCTCCCATGGCATGGCGTTCACGCTTCTTTGAGTACCGAGCGTACAGGTCAATTATCAAAGAC TACTTCCACCGTGGCGCCAAGTGGACAACAGCTCCTAAGCCCACAATGGCTGATGAGCTTTATAACCAGGATTAT CCCATCCACTCTGTAGAAGACAGACACAAATTGGCTGCTCAGGGAAAATTTGTGACAACTGAGTTTGAGCCATGC TTTGATGCTGCTGACTTCATTCGAGCTGGAAGAGATATTTTTTGCACAGAGAAGCCAGGTTACAAACTACCTAGGC ATTGAATGGATGCGTAGGCATCTTGCTCCAGACTACAGAGTGCATATCATCTCCTTTAAAGATCCCAATCCCATG GATCTTTTCAAGAAAGCAGGATGGACTATCATTACTCCTCCAACACCAATCATCCCAGACGATCATCCACTCTGG ATGTCATCCAAATGGCTTTCCATGAATGTCTTAATGCTAGATGAAAAACGTGTTATGGTGGATGCCAATGAAGTT CCAATTCAAAAGATGTTTGAAAAGCTGGGTATCACTACCATTAAAGTTAACATTCGTAATGCCAATTCCCTGGGA GGAGGCTTCCATTGCTGGACCTGCGATGTCCGGCGCCGAGGCACCCTACAGTCCTACTTGGACTGAACAGGCCTG ATGGAGCTTGTGGCTGGCCTCAGATACACCTAAGAAGCTTAGGGGCCAAGGTTCATTCTCCTGCTTTAAAAAGTGC ATGAACTGTAGTGCTTTAAACAATCATCTCCTTAACAGGGGTCGTAAGCCTGGTTTGCTTCTATTACTTTTCTTT GACATAAAGAAAATAACTTCTGCTAGGTATTACTCTCTACTCCTAAAGTTATTTACTATTTGGCTTCAAGTATAA AATTTTGGTGAATGTGTACCAAGAAAAATTAGTCACCTGAGTAACTTGGCCACTAATAATTAACCATCTACCTC TGTTTTTAATTTTCCTTCCAAAAGGCAGCTTGAAATGTTGGTCCTAATCTTAATTTTTTTCCTCTTCTATAGAC TTGAGAATGTTTTTCTCTAAATGAGAGAAAGACTTAGAATGTACACAGATCCAAAATAGAATCAGATTATCTCTT TTTTTCTAAAGGAGAAAGACTTAGAACATACACAGATCCTAAGTAGAACCAGGTAATTGTCTCTTTTTCTAAT TCCATGAATGTTTTTAATATTCTCATCTCAACATTGTGATATATGCTACTAAAAACCTTTTCATATACATCTTAC CTCATTTCAAGTGAATTATTTTAATCTTTTTCTCTCTTTCCAAAAATTTACAGGAATGTTTAGTGTAATTGGATT AATGCGATGTGAAATAATTTTAGTGTTGATACTGTATGTGTATTTTTATTCTAATAAACTTTTGTGTTCCAGATT GAAAA

748/2825 FIGURE 664

MLRVRCLRGGSRGAEAVHYIGSRLGRTLTGWVQRTFQSTQAATASSRNSCAADDKATEPLPKDCPVSSYNEWDPL EEVIVGRAENACVPPFTIEVKANTYEKYWPFYQKQGGHYFPKDHLKKAVAEIEEMCNILKTEGVTVRRPDPIDWS LKYKTPDFESTGLYSAMPRDILIVVGNEIIEAPMAWRSRFFEYRAYRSIIKDYFHRGAKWTTAPKPTMADELYNQ DYPIHSVEDRHKLAAQGKFVTTEFEPCFDAADFIRAGRDIFAQRSQVTNYLGIEWMRRHLAPDYRVHIISFKDPN PMHIDATFNIIGPGIVLSNPDRPCHQIDLFKKAGWTIITPPTPIIPDDHPLWMSSKWLSMNVLMLDEKRVMVDAN EVPIQKMFEKLGITTIKVNIRNANSLGGGFHCWTCDVRRRGTLQSYLD

749/2825 FIGURE 665A

ATCGGGAGAGACGGAGGCTGTGTCTCCAGCTCTACTTCCTGTGGCTGGGCTGTGTGGTGCTCTGGGCGCAGGGC ACGGCCGGCCAGCCTCAGCCTCCTCCGCCCAAGCCGCCCCAGCCGCCGCCGCAACAGGTTCGGTCCGCT ACAGCAGGCTCTGAAGGCGGGTTTCTAGCGCCCGAGTATCGCGAGGAGGGTGCCGCAGTGGCCAGCCGCGTCCGC CGGCGAGGACAGCAGGACGTGCTCCGAGGGCCCAACGTGTGCGGCTCCAGATTCCACTCCTACTGCTGCCCTGGA TGGAAGACGCTCCCTGGAGGAAACCAGTGCATTGTCCCGATTTGTAGAAATAGTTGTGGAGATGGATTTTGTTCC CGTCCTAACATGTGTACTTGTTCCAGTGGGCAAATATCATCAACCTGTGGATCAAAATCAATTCAGCAGTGCAGT GTGAGATGCATGAATGGTGGGACCTGTGCAGATGACCACTGCCAGTGCCAGAAAGGATATATTGGAACTTATTGT GGACAACCTGTCTGTGAAAATGGATGTCAGAATGGTGGACGTTGCATCGCCCAACCGTGTGCTTGTGTTTATGGG TTCACTGGTCCACAGTGTGAAAGAGATTACAGGACAGGCCCGTGTTTCACTCAGGTCAACAACCAGATGTGCCAA GGGCAGCTGACAGGCATTGTCTGCACGAAGACTCTGTGCTGTGCCACCACTGGACGGCGTGGGGCCATCCCTGT GAGATGTGTCCAGCCCAGCCTCAGCCCTGCCGACGGGGTTTCATCCCCAACATCCGCACTGGAGCTTGCCAAGAT GTTGATGAATGCCAGGCTATCCCAGGGATATGCCAAGGAGGAAACTGTATCAATACAGTGGGCTCTTTTGAATGC AGATGCCCTGCTGGTCACAAACAGAGTGAAACTACTCAGAAATGTGAAGACATTGATGAGTGCAGCATCATTCCT GGGATATGTGAAACTGGTGAATGTTCCAACACCGTGGGAAGCTATTTTTGTGTTTTGTCCACGTGGATATGTAACC CAAGAGCTCCCGGGGAGAATGACGAAAATGCAGTGCTGCTGTGAGCCTGGCCGCTGCTGGGGCATCGGAACCATT $\tt CCAGGGAGTGCTGGTTCCAGACCTGGAGGCACTGGGGGAAATGGCTTTGCCCCAAGTGGCAATGGCAATGGCTAT$ GGCCCAGGAGGGACAGGCTTCATCCCCATCCCTGGAGGCAATGGCTTTTCTCCTGGCGTTGGGGAGCCGGTGTG GGGGCCGGGGACAGGGACCTATCATCACTGGACTAACAATTCTGAACCAGACAATAGATATCTGTAAGCATCAT GCTAACCTTTGTTTAAATGGACGCTGTATACCAACTGTCTCAAGCTACCGATGTGAATGCAACATGGGTTATAAG ${\tt CAGGATGCAAATGGAGATTGTATAGATGTTGATGAATGCACATCAAATCCCTGCACTAATGGAGATTGTGTTAAC}$ GATGAGTGCATCCAGAATGGGGTTCTTTGTAAAAACGGTCGATGCGTGAACTCAGATGGAAGTTTCCAGTGCATT TGCAATGCCGGCTTTGAATTAACTACAGATGGAAAAAACTGTGTTGATCATGATGAATGTACAACTACCAACATG TGTTTGAATGGAATGTGCATCAATGAAGATGGCAGCTTCAAGTGCATCTGCAAACCAGGATTTGTCTTGGCTCCA AATGGGCGTTACTGTACTGATGTTGATGAATGCCAGACCCCAGGAATCTGCATGAATGGGCACTGCATCAACAGT GATATATGTGCCAATGGGATTTGTGAAAACTTACGTGGTAGTTACCGTTGTAATTGCAACAGTGGCTATGAACCA GATGCCTCTGGAAGAACTGTATTGACATTGATGAATGTTTAGTAAACAGACTGCTTTGTGATAACGGATTGTGC CGAAACACGCCAGGAAGTTACAGCTGTACGTGCCCACCAGGGTATGTGTTCAGGACTGAGACAGAGACCTGTGAA GATATAAATGAATGTGAAAGCAACCCATGTGTCAATGGGGCCTGCAGAAACAACCTTGGATCTTTCAATTGTGAA TGTTCGCCCGGCAGCAAACTCAGCTCCACAGGATTGATCTGTATTGACAGCCTGAAGGGGACCTGTTGGCTCAAC GCCTGGGGGAGCCCCTGTGAGCGGTGTGAACTAGATACAGCTTGCCCAAGAGGGCTTGCCAGGATTAAAGGTGTT ACGTGTGAAGATGTTAATGAGTGTGAGGTGTTCCCTGGCGTTTGTCCAAATGGACGCTGTGTCAACAGTAAGGGA CAGTGTTACTTGAAGTGGGATGAAGATGAATGCATCCACCCCGTTCCTGGAAAGTTCCGCATGGATGCCTGCTGC TGTGCTGTCGGGGCGGCTTGGGGCACCGAGTGTGAGGAGTGCCCCAAACCTGGCACCAAGGAATACGAGACACTG TGCCCCGCGGGGCTTGCTTACCGAGGGGATGTTCTTACTGGCCGCCATTTTACAAAGACATCAATGAA TGCAAAGCATTTCCTGGGATGTGCACTTATGGGAAGTGCAGAAATACAATCGGAAGCTTCAAATGCCGTTGCAAT AGTGGCTTTGCTCTAGACATGGAGGAAAGAAACTGCACGGACATCGACGAGTGCAGGATTTCTCCTGACCTCTGT GGCAGTGGAATCTGCGTCAATACACCGGGCAGCTTTGAGTGCGAGTGCTTCGAAGGCTATGAAAGTGGCTTCATG ATGATGAAGAACTGCATGGACATTGACGGATGTGAACGTAACCCTCTCTTTGTAGGGGTGGCACCTGTGTGAAC

ACTGAGGGCAGCTTTCAGTGTGACTGCCCACTGGGACACGAGCTGTCACCATCCCGTGAGGACTGTGTGGATATT

750/2825 FIGURE 665B

AATGAATGCTCCCTGAGTGACAATCTCTGCAGAAATGGAAAATGTGTGAACATGATTGGAACCTATCAGTGCTCT TGCAATCCTGGATATCAGGCTACGCCAGACCGCCAGGGCTGTACAGATATTGATGAATGTATGATAATGAACGGA GGCTGTGACACCCAGTGCACAAATTCAGAGGGAAGCTACGAATGCAGCTGCAGTGAGGGTTATGCCCTGATGCCA GATGGGAGATCGTGTGCAGACATTGATGAATGTGAAAACAATCCTGATATCTGTGATGGCGGCCAGTGTACCAAC ATTCCTGGAGAGTATCGCTGCCTCTGCTATGATGGCTTCATGGCTTCCATGGACATGAAAACATGCATTGATGTC AATGAATGTGACCTAAATTCAAATATCTGCATGTTTGGGGAATGTGAGAACACAAAGGGATCCTTCATTTGCCAC TGTCAGCTGGGTTACTCAGTGAAGAAGGGGACCACAGGATGTACAGATGTGGATGAGTGTGAAATTGGTGCTCAT AACTGCGACATGCATGCCTCATGTCTGAATATCCCAGGAAGCTTCAAGTGTAGCTGCAGAAAGGCTGGATTGGA AACGGCATCAAGTGTATTGATCTGGACGAATGTTCTAATGGAACCCACCAGTGTAGCATCAATGCTCAGTGTGTA AATACCCCGGGCTCATACCGCTGTGCCTCCCGAAGGTTTCACTGGTGATGGCTTTACCTGCTCAGATGTTGAT GAGTGTGCAGAAAACATAAACCTCTGTGAGAACGGACAGTGCCTTAATGTCCCGGGTGCATATCGCTGCGAGTGT GAGATGGGCTTCACTCCAGCCTCAGACAGCAGATCCTGCCAAGATATTGATGAATGCTCCTTCCAAAACATTTGT GTCTCTGGAACATGTAATAACCTGCCTGGAATGTTTCATTGCATCTGCGATGATGGTTATGAATTGGACAGAACA GGAGGGAACTGTACAGATATTGATGAGTGTGCAGATCCTATAAACTGTGTCAATGGCCTATGTGTCAACACGCCT GGTCGCTATGAGTGTAACTGCCCACCCGATTTTCAGTTGAACCCAACTGGTGTGGGTTGTTGTTGACAACCGTGTG AGTCGCTCTTCATGCTGCTGCTCTCTGGGAAAGGCCTGGGGAAACCCCTGTGAGACATGCCCCCTGTCAATAGC ACTGAATATTACACCCTGTGTCCCGGAGGTGAAGGCTTCAGACCCTAACCCCATCACAATCATTTTAGAAGACATT GACGAATGCCAGGAGTTACCAGGTCTCTGCCAGGGTGGAAACTGCATCAACACTTTTGGGAGCTTCCAGTGTGAG TGCCCACAAGGCTACTACCTCAGCGAGGATACCCGCATCTGTGAGGATATTGATGAGTGTTTTGCACATCCTGGT GTGTGTGGGCCTGGGACCTGCTATAACACCCTGGGAAATTACACCTGCATTTGCCCACCTGAGTACATGCAGGTC AATGGAGGCCACAACTGCATGGACATGAGAAAAAGCTTTTGCTACCGAAGCTATAATGGAACCACTTGTGAGAAT GAGTTGCCTTTCAATGTGACAAAAAGGATGTGCTGCTGCACATATAATGTGGGCAAAGCTGGGAACAAACCTTGT GAACCATGCCCAACTCCAGGAACAGCTGACTTTAAAACCATATGTGGAAATATTCCTGGATTCACCTTTGACATT CACACAGGAAAAGCTGTTGACATTGATGAATGTAAAGAGATTCCAGGCATTTGTGCAAATGGTGTGCATTAAC CAGATTGGCAGTTTCCGCTGTGAATGCCCTACAGGATTCAGTTACAATGACCTGCTGTTGGTTTGTGAAGATATA GATGAGTGCAGCAATGGTGATAATCTCTGCCAGCGGAATGCAGCTGCATCAATAGTCCTGGTAGTTACCGCTGT GTTTGCAGTCATGGCTTGTGTGTTGATCTGCAAGGAAGTTACCAGTGCATCTGCCACAATGGCTTTAAGGCTTCT CAGGACCAGACCATGTGCATGGATGTTGATGAGTGCGAGCGCCCCCATGTGGAAATGGAACTTGTAAAAACCCC TGCAGTTCCTTTTTTGGTCAGGTGTGCAGAAATGGACGTTGTTTTAATGAAATTGGTTCTTTCAAGTGTCTATGT AACGAAGGTTATGAACTTACCCCAGATGGCAAAAACTGTATAGACACTAATGAGTGTGTCGCCCTTCCCGGCTCT $\tt TGCTCTCGGTACCTGTCAGAATTTGGAGGGATCCTTCAGATGCATCTGTCCCCCAGGGTATGAAGTAAAAAGC$ GAGAACTGCATTGATATAAATGAATGTGATGAAGATCCCAACATTTGTCTTTTTGGTTCCTGTACTAATACTCCA GGGGGCTTCCAGTGCCTCTGCCCCCTGGCTTTGTACTATCTGATAATGGACGGAGATGCTTTGATACTCGCCAG AGCTTCTGCTTCACAAATTTTGAAAATGGAAAGTGTTCTGTACCCAAAGCTTTCAACACCACAAAAGCAAAATGC TGCTGTAGTAAGATGCCAGGAGAGGGCTGGGGGGGACCCCTGTGAGCTGTGCCCCAAAGACGATGAAGTTGCATTT CAGGATTTGTGTCCATATGGCCATGGAACTGTCCCTAGTCTTCATGATACACGTGAAGATGTCAATGAGTGTCTTGAGAGCCCAGGCATTTGTTCAAATGGTCAATGTATCAACACCGACGGATCTTTTCGCTGTGAATGTCCAATGGGC TACAACCTTGACTACACTGGAGTACGCTGTGTGGATACTGATGAGTGTTCAATCGGCAATCCGTGTGGAAATGGT ACATGCACCAATGTTATTGGGAGTTTTGAATGCAATTGCAATGAAGGCTTTGAGCCAGGGCCCATGATGAATTGT GAAGATATCAACGAATGTGCCCAGAACCCACTGCTGTGTGCTTTACGCTGCATGAACACTTTTGGGTCCTATGAA TGCACGTGCCCGATTGGCTATGCCCTCAGGGAAGATCAAAAGATGTGCAAAGATCTGGATGAATGTGCTGAAGGG TTACACGACTGTGAATCTAGGGGCATGATGTGTAAGAATCTAATCGGCACCTTCATGTGCATCTGCCCTCCTGGA GGACGTTGTGTTAACATTATTGGAAGCTATAGATGTGAGTGTAATGAAGGATTCCAGTCAAGTTCTTCAGGCACT GAATGCCTTGACAATCGACAGGGTCTCTGCTTTGCAGAGGTACTGCAGACAATATGTCAAATGGCATCCAGTAGT

751/2825 FIGURE 665C

 $\tt CGCAATCTCGTCACTAAGTCAGAATGCTGCTGTGATGGTGGGCGAGGCTGGGGCCACCAGTGCGAGCTTTGCCCA$ CTTCCTGGAACTGCCCAGTACAAAAAGATATGTCCTCATGGCCCAGGATATACAACTGATGGAAGAGATATTGAT GAATGTAAGGTAATGCCAAACCTCTGCACCAATGGTCAGTGCATCAATACCATGGGCTCATTCCGATGCTTCTGC AAGGTTGGCTACACCACAGACATCAGTGGAACCTCTTGTATAGACCTTGATGAATGCTCCCAGTCCCCGAAACCA TGCAACTACATCTGCAAGAACACTGAGGGGAGTTATCAGTGTTCATGTCCGAGGGGGTATGTCCTGCAAGAGGAT GGAAAGACATGCAAAGACCTTGATGAATGTCAAACAAGCAGCATAACTGCCAGTTCCTCTGTGTCAACACCCTG GGGGGGTTTACCTGTAAATGTCCACCTGGTTTCACACAGCATCACACTGCTTGTATCGACAACAACGAATGTGGG TCTCAACCTTTGCTTTGTGGAGGAAAGGGAATCTGTCAAAACACTCCAGGCAGTTTCAGCTGTGAATGCCAAAGA GGGTTCTCTCTTGATGCCACCGGACTGAACTGTGAAGATGTTGATGATGTGATGGGAACCACAGGTGCCAACAC GGCTGCCAGAACATCCTGGGTGGCTACAGATGTGGCTGCCCCCAAGGCTACATCCAGCACTACCAGTGGAATCAG TGTGTCGATGAGAATGCATCCCAATCCCAATGCCTGTGGCTCTGCTTCCTGCTACAACACCCTGGGGAGTTAC TCCAAGAACCCCTGCAATTACGGCTGCTCTAACACGGAGGGGGGCTACCTCTGTGGCTGCCCCCCTGGGTATTAC AGAGTGGGACAAGGCCACTGTGTCTCAGGAATGGGATTTAACAAGGGGCAGTACCTGTCACTGGATACAGAGGTC CAGAAGAGAAGTATTCATGAACCTGATCCCACTGCTGTTGAACAGATCAGCCTAGAGAGTGTCGACATGGACAGC CCCGTCAACATGAAGTTCAACCTCTCCCACCTCGGCTCTAAGGAGCACATCCTGGAACTAAGGCCCGCCATCCAG CCCCTCAACAACCACATCCGTTATGTCATCTCTCAAGGGAACGATGACAGCGTCTTCCGCATCCACCAAAGGAAT GGGCTCAGCTACTTGCACACGGCCAAGAAGAAGCTCATGCCCGGCACATACACACTGGAAATCACTAGCATCCCT CTCTACAAGAAGAAGAGCTTAAGAAACTGGAAGAGAGCAATGAGGATGACTACCTCCTAGGGGAGCTTGGGGAG GCTCTCAGAATGAGGCTGCAGATTCAGCTCTATTAACCGTTCACAGACTTGGGCCCAGGCTCAAATCCTAGCACA GCCAGTCTGCAGAAGCATTTGAAAAGTCAAGGACTAATTTTAAAGAGGAAAAATAATAATAACTCTTGTTTCTTT AGCTCAAAGGCAACCGTGGTTACTGTATTTTTTATATAACTTCATTTTAAAATATATTAAAAGAAACCTAAATGT ATGGAGAAATGAACAAACTATGTAAACAAAAAGGGAAACTCACTTGTTTTCTTTAGATTTATAAATTTGAGCTA TTTTTTTTAGAGGTGCTTTTTAAAAATCCAATAGATACAAGAGATGTTTCCTTTGGTTTTCTGCCAGTCATCCAG CTGATACACCTGATCGATTTTAAAGAAAGCCACACAGAGCTGAATCGGGCAGTGCTAATCAATAATTTAAAAG ACATGAATGTCATTAGATCCTTTATAACGTAGATCGAAGCCAAAGCAGCTCATTTGTGACAACATTTCATATCAC CAGACACCAGGCAACAGAAGTTGAAGCACAACCACTGTAGCAAAATACCTTGACTGCTTGTGAGACCATTAGC ATTGCAGGCCAAACCGTACTGTATTTCCTTCTCATAACCTCAAGGAACCATATGTGCTACCCACAACACCTCATT CTTACCCAGGGTGCGCTCCTCATGGTACTGTAGGCAGCTGAAGAACCGCCGTTCCCTTGAAAGGGAACACC TGGCATTCTGTGGTGTTTCGTGCTGTCTTAAATAATGGTGCATTTATTATGTTCAAGTTATTTCAGGATTGCCAT AATTTTCATTAATACTGTAGTTATACACCATATGCCTCATTTTATCATAGCCTATTGTGTATGAAAGATGTTTGT ACAATGAATTGATGTTTAGTTTTAGTCATTTAAAAAGATATTGTACCAGGATGTGCTATTAAGAGCACGTA TCCATTATTCTTCTCAACCCAAGAACCTGTTTCCTGGACCAGTGACCAAACCTCATATGTGAAATGGCCAAAGCA CATGCAGGCTCCTGGTTGTTCCTCTAAACCTGTGCTGACCAAAGATTAGTAACCAGTTATACCCAGTATTTTGA GGTTTTATTGTTTTTTTAATAACTAAAAAAAAAACTCGTGCC

752/2825 FIGURE 666

MGRRRRLCLQLYFLWLGCVVLWAQGTAGQPQPPPPKPPRPQPPPQQVRSATAGSEGGFLAPEYREEGAAVASRVR RRGOODVLRGPNVCGSRFHSYCCPGWKTLPGGNQCIVPICRNSCGDGFCSRPNMCTCSSGQISSTCGSKSIOOCS VRCMNGGTCADDHCQCQKGYIGTYCGQPVCENGCQNGGRCIAQPCACVYGFTGPQCERDYRTGPCFTQVNNQMCQ GQLTGIVCTKTLCCATTGRAWGHPCEMCPAQPQPCRRGFIPNIRTGACQDVDECQAIPGICQGGNCINTVGSFEC RCPAGHKQSETTOKCEDIDECSIIPGICETGECSNTVGSYFCVCPRGYVTSTDGSRCIDQRTGMCFSGLVNGRCA OELPGRMTKMOCCCEPGRCWGIGTIPEACPVRGSEEYRRLCMDGLPMGGIPGSAGSRPGGTGGNGFAPSGNGNGY GPGGTGFIPIPGGNGFSPGVGGAGVGAGGQGPIITGLTILNQTIDICKHHANLCLNGRCIPTVSSYRCECNMGYK QDANGDCIDVDECTSNPCTNGDCVNTPGSYYCKCHAGFQRTPTKQACIDIDECIQNGVLCKNGRCVNSDGSFQCI CNAGFELTTDGKNCVDHDECTTTNMCLNGMCINEDGSFKCICKPGFVLAPNGRYCTDVDECOTPGICMNGHCINS EGSFRCDCPPGLAVGMDGRVCVDTHMRSTCYGGIKKGVCVRPFPGAVTKSECCCANPDYGFGEPCQPCPAKNSAE FHGLCSSGVGITVDGRDINECALDPDICANGICENLRGSYRCNCNSGYEPDASGRNCIDIDECLVNRLLCDNGLC RNTPGSYSCTCPPGYVFRTETETCEDINECESNPCVNGACRNNLGSFNCECSPGSKLSSTGLICIDSLKGTCWLN IQDSRCEVNINGATLKSECCATLGAAWGSPCERCELDTACPRGLARIKGVTCEDVNECEVFPGVCPNGRCVNSKG SFHCECPEGLTLDGTGRVCLDIRMEOCYLKWDEDECIHPVPGKFRMDACCCAVGAAWGTECEECPKPGTKEYETL CPRGAGFANRGDVLTGRPFYKDINECKAFPGMCTYGKCRNTIGSFKCRCNSGFALDMEERNCTDIDECRISPDLC GSGICVNTPGSFECECFEGYESGFMMKNCMDIDGCERNPLLCRGGTCVNTEGSFQCDCPLGHELSPSREDCVDI NECSLSDNLCRNGKCVNMIGTYQCSCNPGYQATPDRQGCTDIDECMIMNGGCDTQCTNSEGSYECSCSEGYALMP DGRSCADIDECENNPDICDGGQCTNIPGEYRCLCYDGFMASMDMKTCIDVNECDLNSNICMFGECENTKGSFICH CQLGYSVKKGTTGCTDVDECEIGAHNCDMHASCLNIPGSFKCSCREGWIGNGIKCIDLDECSNGTHQCSINAQCV NTPGSYRCACSEGFTGDGFTCSDVDECAENINLCENGQCLNVPGAYRCECEMGFTPASDSRSCQDIDECSFQNIC VSGTCNNLPGMFHCICDDGYELDRTGGNCTDIDECADPINCVNGLCVNTPGRYECNCPPDFQLNPTGVGCVDNRV GNCYLKFGPRGDGSLSCNTEIGVGVSRSSCCCSLGKAWGNPCETCPPVNSTEYYTLCPGGEGFRPNPITIILEDI DECQELPGLCQGGNCINTFGSFQCECPQGYYLSEDTRICEDIDECFAHPGVCGPGTCYNTLGNYTCICPPEYMQV NGGHNCMDMRKSFCYRSYNGTTCENELPFNVTKRMCCCTYNVGKAGNKPCEPCPTPGTADFKTICGNIPGFTFDI HTGKAVDIDECKEIPGICANGVCINQIGSFRCECPTGFSYNDLLLVCEDIDECSNGDNLCQRNADCINSPGSYRC ECAAGFKLSPNGACVDRNECLEIPNVCSHGLCVDLQGSYQCICHNGFKASQDQTMCMDVDECERHPCGNGTCKNT VGSYNCLCYPGFELTHNNDCLDIDECSSFFGQVCRNGRCFNEIGSFKCLC

753/2825 FIGURE 667A

GGGGAGGAGAAAGGCGAAGGCGAAGGGGAGGGTGGAGAGTGATATGAAGAGCGAGAAAAAGAGAGGACAGCG GACGAGCAGATCCGGTATCTGGAATCCCGGCGCCTAGAACGTGTTTTTCGGGAGAGCAAAGGCTGTGTCTACGGC AGGCTGGGGATATAGCCTCTCCTTCCGATGAAAAGAGAAAGGAAGAATGGACTACAGCCACCAAACGTCCCTAGT CCCATGTGGACAAGATAAATACATTTCCAAAAATGAACTTCTCTTGCATCTGAAGACCTACAACTTGTACTATGA AGGCCAGAATTTACAGCTCCGGCACCGGGAGGAAGAAGACGAGTTCATTGTGGAGGGGCTCCTGAACATCTCCTG CTGGCACTCTGGCTGTAACCTGGGGGCTCAGGGAACCACTCTGAAGCCCCTGACTGTGCCCAAAGTTCAGATCTC AGAGGTGGATGCCCCGCCGGAGGGTGACCAGATGCCAAGCTCCACAGACTCCAGGGGCCTGAAGCCCCTGCAGGA GGACACCCCACAGCTGATGCGCACACGCAGTGATGTTGGGGTGCGTCGCCGTGGCAATGTGAGGACGCCTAGTGA CCAGCGGCGAATCAGACGCCACCGCTTCTCCATCAACGGCCATTTCTACAACCATAAGACATCCGTGTTCACACC AGCCTATGGCTCTGTCACCAACGTCCGCATCAACAGCACCATGACCACCCCACAGGTCCTGAAGCTGCTCAA CAAATTTAAGATTGAGAATTCAGCAGAGGAGTTTGCCTTGTACGTGGTCCATACGAGTGGTGAGAAACAGAAGCT GAAGGCCACCGATTACCCGCTGATTGCCCGAATCCTCCAGGGCCCATGTGAGCAGATCTCCAAAGTGTTCCTAAT GGAGAAGGACCAGGTGGAGGAAGTCACCTACGACGTGGCCCAGTATATAAAGTTCGAGATGCCGGTACTTAAAAG CTTCATTCAGAAGCTCCAGGAGGAAGAAGATCGGGAAGTAAAGAAGCTGATGCGCAAGTACACCGTGCTCCGGCT AATGATTCGACAGAGGCTGGAGGAGATAGCCGAGACCCCAGCAACAATCTGAGCCATGAGAACGAGGGGATCTGG CAAACCTCCCAGCTCCGGCCAAGCCATCATTTGCTACCTGGAGCTGGATGTAGAAGTCAGCAGACAGCTCCCTA TCCCTGGACCCCTGCCCTCCTTTTTCTGCTCACAAGGACTTTTGATTTTAGTTATAAGGAGGACCCAAAATGTG TGTGTGTACATGTGTGCACACATGGTACGTGTCCATGTGCCTACCTGATACTTTCACATGTAATTAAATTCCA GGCAACCAGCACAAGAGCCGTGAGCTTGGCACATGTGCTGCTCGTGAGCAGGAAAATCAGAGGAGCCACTGATCT AGAGGGAAGAGGGTTCTCCAGGTTCACCATTTGGGTTGTTTATATGTTGGTAGAAATTCTCCCTGTATGCCTAGA AGGATCAGTGAATGTAAGAGCCTTGGAAATTAACAAAATAACACCCACATAACCTTGCGGCAAGTCTGATGGAAA GAAAAAGATAAACCATCCGTGGGGTAGATGCAATAAGCCCACGTATTTTTACACTGGAAACGTTGATTGTTTTAA ATGACAAAGACATATGTGATGTTCTATGTGGAAACCTGTGAAGAGTGGATTCTGCCTCCATCTCTGCCTCCATGG CTACCTTTAGGAGACAGAGATCCTGTGTTTTCTCTGTACCCAGCTGACAGCCTGTCTCTATGGCGCTTCCT TGAGTGGAAGGAAATGTCTCAAGAAACAAAGATCTCGCTGGTGCGTACACAGTGCTGACCAGCTAGTGTGGCCAG GGCCTGGTGGCCTGGTGGCCAGGAAGTTTCAGGTTGAAGGGAAATGTCGAGGCTACCTGCAGATATGACAGGTGC CTTGAACGCAGCCCATCTTCATGTCATCAAAGGTCTTCCTGCACTTGAAGCTGGGGCGATGTTTGCAGTCAAGAC CATCTTGCTACTGAGTGTGGGGTTCAGGGAAGCTCTTTAGGCCACCTGGTGAAGGTGCATGGGGAGGATGGAGCT TCTCCTCAGCTCCTGAGCAGCCACCTATGTGATCTTTAAATCCAACCCCAATGGGAGAAAAGGGCAAGAACAG TCTGTGCCCTGGGACTCCTATCAGGAAGCTTGACAGGCAGCTGGGCATCAGTGCAGCTGATATCGTTTGAGGAGG TCTTTGAGCCTAGCTGGGGTAGAGGCACTGCCCATCTCTTCTCCACCTTCTCCACAGAATGTTTGCAGAGCTG CCTGGGCACCCTCCTGCCCCGATTCATACCTATGGCTTCTTGAGAAGGCTCACAGCTGTGGTCTTAACGTAGAC CAGCACCAGCCCTGTGGGGCATGGAGTGGAAGCCCAGAAGGGCTTCTGCAAGCTGCACAGAACTGGGGTAAGAAG ACAAAGAGTAGCCACCGGGAGAGGCTTCCTTTGTTACAGCTGGGAAAGAACAGTTCTGTGAATGCAAACACCTCC TGAGTTTTGCAATTGAGAAAATGATTTGGAGAACTTCTCTTCTGGTAATTTTTATTTTGAATGTTCAGGGCCTTA GTTGGCCCCAGTAATTCTCCTTGGAGGACTTGGGAGAAGAATTTCCACAAAGCAAACTACTAACCACTAGCTCTT ACTGGACAGCGATTTCTGGCTTATAAGAGTTCTCTTTGATTTGCACTAGCACTACGATAGTGTTAGATGGGGAAA TACTGCAACATGTCCAGTTGGCCAGATCACTTTCCAAGGGAGCGATACTAAGGCAGACTCAGCTTTTTAAAGATG $\verb|CCATTTTGTCCTGCCCTCTTGAGAGGTCATTTCTCACGTCCTAAGAACCTGATCAGAAATTTTGGAAGGGTTCTT| \\$ TGAAATAGCAGCAGTTGAAACAGAGACACTTTGCCACAGTGTGGAGCAGATTTTCTCACTGGTATCACATGGTCT

754/2825 FIGURE 667B

TGCAGTTTTGAACTCTTCGACCGATTTGTGGGAGTTTATGTAATTGCGTGCAATGAACCTGAAATTGTAAAGG ACAAAAGACCAGTTTATAGGGTTGGGTTTTTTTTCCAACTTGTGAAAAGCAGTTTAGCTGCATCTGTCTCCCCAC GGTGGAATTAAGCACAAGGTCACATTCTCTGTGATCACATGAGAGGGGAAGGTGATGACTTAAATGGCAGGGGGTG GGGATTATCTTGGGGAGAGGCTGAAAAGCACAAAAGATAGTCTTCCCTGTACGTATTGGTGAAGAACGTGCACAA GGCTGGATGGACTTCAACTTGGAGTTGAGGTTGAGGCAAGAGGATTTCTGGATATTAGTCACCCATCTGCAAGAAA AATGCTGAGGCCTCGGGTCAAGATTTTGATCTGAGACATGCTGATGCTTCAAGGAGAAATATTTTCACAATCCTC TCTTCCCTCACCAGAAGAGAACAGTACTCTCTCCTAGAAACCTCTAGGTAAACACATTTTATCCTAATATCGGTA GCATATAATGCCCCCCCAAAATATCTGTTTTCCATGCAAAAAAGTCTCAACAAGAAGTCTGTGGAGTTGAGTGG TTACTTCAAAGTGTCAGGAGAGTGAAGAAATTGGCCACAGAAGAGCAAGAAGCTCTCTTAAGAAAAAGGGAATTCT CTTTAAAGAAACCACCACCAACAACAAAACCAACCAAAAACCATGTTTTATGTCAAAGCTCTGTAGCACAGAGAAT AAAGTGTTGGGATTACAGGCGTGAGCCACTGTGCCCAGCCAAAAGAGAAATTTCTACATGAACAAGGCAATTTCA GTGTCTTACAGCGGCCAAACCATGACGTGAAGAATGAGATAGGAGACAGGAGATCACCATAAGCGTCCCTGATAT AGCAGCACACTTTTCACGTTTCCACTTAAATCGTTTTGCACAAAGTCTTGCTTCGCTCAGATGAGATGAGATAT GATTTCCTAGAGATGTAAAAATAAGAATGAATGTGGCGCCCCCTTCTTCCAGATGTAATAGAAAGCTCTGCCCTA TCACAAGGGGGGTGTTGAAGCGCCCCTTGTGTTTTTAACTGTATTTAACTGAGCACAAGATGCACAAGCTGTGGTG GGAAACCCTCAGTTTACCTTTGGAGTCTTCCCTGCAGATCGCAGACCTGTTTCCAGGCTGATGTTTCTGGTGTGT AATTGCTAGCGTTTCTGAAGGGTTTTCCCAATTGTTTTAGCCTTGTGAAGTATTCTTAATTATAACTTGCCTTTC AGCGATGGTACATGACTTGATTCAACGTTTGGTTCTGAACTTACACACTGATGCGTTTACTCATCTAACATAATC TGACAGGGCCTCAGCAAGGGAGCCATACATTTTTGTAACATTTTGATATGTTTTAATGCATCTGACTTAGATCTT ACTGAAATAAAGCACTTTTCAAAGAG

755/2825 FIGURE 668

MDYSHQTSLVPCGQDKYISKNELLLHLKTYNLYYEGQNLQLRHREEEDEFIVEGLLNISWGLRRPIRLQMQDDNE RIRPPPSSSSWHSGCNLGAQGTTLKPLTVPKVQISEVDAPPEGDQMPSSTDSRGLKPLQEDTPQLMRTRSDVGVR RRGNVRTPSDQRRIRRHRFSINGHFYNHKTSVFTPAYGSVTNVRINSTMTTPQVLKLLLNKFKIENSAEEFALYV VHTSGEKQKLKATDYPLIARILQGPCEQISKVFLMEKDQVEEVTYDVAQYIKFEMPVLKSFIQKLQEEEDREVKK LMRKYTVLRLMIRQRLEEIAETPATI

756/2825 FIGURE 669

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757/2825 FIGURE 670

 $\label{thm:lalaqaaragppggrslhssavaatykyvnmqdpemdmksvtdraartllwtelfrglgmtlsylfrepatinypfekgplsprfrgehalrrypsgeerciacklceaicpaqaitieaepradgsrrttrydidmtkciycgfcqeacpvdaivegpnfefstetheellynkekllnngdkweaeiaaniqadylyr$

758/2825 FIGURE 671A

TGGGGTCTTCCCGCTGCCCAGCAGCCTACAGGCGCGGTGCACTCTGGGGGAACATGGCCGCTTCCGGTCTCCCTC AAGACTGCTTCAGCCTTTCCCTGTGCTGCCCCTGCCGCGCGATGGAGAGTCTCGAGCTGCGAGAGTCTTGGCT CCCAGCCGGCGGCGCCCCCCCCCGCGTGGACTCCTTGTCCAGTGCCTCCACTTCTCATTCAGAGAATTCAG TGCATACAAAATCAGCTTCTGTTGTATCATCAGATTCCATTTCAACTTCTGCCGACAACTTTTCTCCTGATTTGA GGGTCCTGAGGGAGTCTAACAAGTTAGCAGAAATGGAAGAACCACCCTTGCTTCCAGGAGAAAATATTAAAGACA TGGCCAAAGATGTAACTTATATGTCCATTCACTGGCGCTGTACGAGGAACTCTGACTGTCACGAATTATAGGT TATATTTCAAAAGCATGGAACGGGATCCCCCATTTGTTTTAGATGCTTCCCTTGGTGTGATAAATAGAGTAGAAA AAATTGGTGGTGCTTCTAGTCGAGGTGAAAATTCTTATGGACTAGAAACTGTGTGTAAGGATATTAGGAATTTAC GATTTGCTCATAAACCTGAGGGGCGGACAAGAAGATCCATATTTGAGAATCTAATGAAATATGCATTTCCTGTCT CTAATAACCTGCCTCTTTTTGCTTTTGAATACAAAGAAGTATTCCCTGAAAATGGGTGGAAGCTATATGACCCTC TTTTAGAGTATAGAAGGCAGGGAATTCCAAATGAAAGCTGGAGAATAACAAAGATAAATGAACGATATGAACTTT GTGATACATACCCTGCCCTCCTGGTTGTGCCAGCAAATATTCCTGATGAAGAATTAAAGAGAGTGGCATCCTTCA GATCAAGAGGCCGTATCCCAGTTTTATCATGGATTCATCCTGAAAGTCAAGCCACAATCACTCGGTGTAGCCAGC CCATGGTTGGAGTGGAAAGCGAAGCAAAGAAGATGAAAAATACCTTCAAGCTATCATGGATTCCAATGCCC AGTCTCACAAAATCTTTATATTTGATGCCCGGCCAAGTGTTAATGCTGTTGCCAACAAGGCAAAGGGTGGAGGTT ATGAAAGTGAAGATGCCTATCAAAATGCTGAACTAGTTTTCCTGGATATCCACAATATTCATGTTATGAGAGAAT CATTACGAAAACTTAAGGAGATTGTGTACCCCAACATTGAGGAAACTCACTGGTTGTCTAACTTGGAATCTACTC ATTGGCTAGAACATATTAAGCTTATTCTTGCAGGGGCTCTTAGGATTGCTGACAAGGTAGAGTCAGGGAAGACGT CTGTGGTAGTGCATTGCAGTGATGGTTGGGATCGCACAGCTCAGCTCACTTCCCTTGCCATGCTCATGTTGGATG TCTGGCAGATGACAAGACAGTTTCCTACCGCATTTGAATTCAATGAGTATTTTCTCATTACCATTTTGGACCACC TATACAGCTGCTTATTCGGAACATTCCTCTGTAATAGTGAACAACAGAGAGAAAAGAGAATCTTCCTAAAAGGA CTGTGTCACTGTGGTCTTACATAAACAGCCAGCTGGAAGACTTCACTAATCCTCTCTATGGGAGCTATTCCAATC TGAAACCACAGGAACCTATTCACAACAGATACAAAGAACTTCTTGCTAAACGAGCAGAGCTTCAGAAAAAAGTAG CTCCTGTCCAAACTGTTGTA**TAA**AGGACTGTAAGATCAGGGGCATCATTGCTATACACTCTTGATTACACTGGCA GCTCTATGAGTAGAAAGTCTTCGGAATTTAGAACCCATCTATGAGAGAAAGTTCAGTCACTTTATTTTAAA TCTCTCTAGGATGAGTTTAGAACTGTAGCAGTGCAGGTGGCTTAAGTGAAGTAACTCCATATGTAATTACATGAT TATGATACTAATCTTTTAAGTATCCAAAGAATATTAAAATACTTCAATCCTGGATTCACAGTGGGAACAAGTTTC TATTAAAAGGCAAATGCTGTTACAAATTTTTGGCATCTGGTAATATTAAAACCATTTTAGAAATACACTCTGTGC TCACTGTGCAGAGGAACATCAGTTTTCAAACCAACACTGAAATTCTGTGGCATCACATATATTGGGCCTTGATGT CATGACAGATCAAAATCATTTGATATCCCTTTCTCCATTCTAGGTTTTTCTTTTTTTCAGTAACTGATTTACCTT GATCACTTTCAACTTCCATATTCTTCATATAGTAAAAGGCAAAGTATTGAAGATACTACGGTGTGGTAGTAGTT GAAAATTATTGCCGTCATTATTTACATACTTAAGACATATTAGCAAGTTGATCCAAAATGGGAGGCCTTATAGAT GTGCTTGGGGGAAAATGAAGGGGAGAAAGTAGCCATACAGGAGTTCAAAGAATTCCATGCCCTTCAGATTAGCCC AATTACCAGAAACATCATGAAAGATATTTTAAAAACTAATTATTTACTACAGTGTATTTCACTTGTCTTGTGTGT CTGAACACACAGAAGCTAATTAGCAAGTTTTTAAGAAGTATTTAAAAAATCTTACTAGGATTGACATTTTTTCTGA ATTCTGTATAAATAGCTTATAGTGAGAAGTACTGTGCTCAAATTTTACATTTTTTTCCTTTGCAAATTCTGTAAT TTCACTCAACGATTAAGTCTACCAAAGAACACTGCATGTAAAAGATGTATTACAATCTCAAAGCCAGTAAAAG AAATCTTGCTTCACTGTTCACCTGCTACAAGTAAGAGTTTGGTGCTGGTAGAAACATTTGACTCTGATGTCTATT ATTATTGGAGGAATATGCACCCCAGATGAAAATGTTCAGTTTGTACCCATTTTTCCTTAACCAACACCCAAATCA

759/2825 FIGURE 671B

760/2825 FIGURE 672

METSSSCESLGSQPAAARPPSVDSLSSASTSHSENSVHTKSASVVSSDSISTSADNFSPDLRVLRESNKLAEMEE PPLLPGENIKDMAKDVTYICPFTGAVRGTLTVTNYRLYFKSMERDPPFVLDASLGVINRVEKIGGASSRGENSYG LETVCKDIRNLRFAHKPEGRTRRSIFENLMKYAFPVSNNLPLFAFEYKEVFPENGWKLYDPLLEYRRQGIPNESW RITKINERYELCDTYPALLVVPANIPDEELKRVASFRSRGRIPVLSWIHPESQATITRCSQPMVGVSGKRSKEDE KYLQAIMDSNAQSHKIFIFDARPSVNAVANKAKGGGYESEDAYQNAELVFLDIHNIHVMRESLRKLKEIVYPNIE ETHWLSNLESTHWLEHIKLILAGALRIADKVESGKTSVVVHCSDGWDRTAQLTSLAMLMLDGYYRTIRGFEVLVE KEWLSFGHRFQLRVGHGDKNHADADRSPVFLQFIDCVWQMTRQFPTAFEFNEYFLITILDHLYSCLFGTFLCNSE QQRGKENLPKRTVSLWSYINSQLEDFTNPLYGSYSNHVLYPVASMRHLELWVGYYIRWNPRMKPQEPIHNRYKEL LAKRAELQKKVEELQREISNRSTSSSERASSPAQCVTPVQTVV

761/2825 FIGURE 673A

GCCATGGGGCCGGGGGCCCGTGGCCGCCGCCGCCGTCGCCGATGTCGCCGCCACCGCCACCGCCACCCGTG $\tt CGGGCGCTGCCCCTGCTGCTGCTAGCGGGGCCGGGGGCTGCAGCCCCCCTTGCCTGGACGGAAGCCCGTGT$ CGGTGTCAGCTGGAGGACCCCTGTCACTCAGGCCCCTGTGCTGGCCGTGGTGTCTGCCAGAGTTCAGTGGTGGCT GGCACCGCCGATTCTCATGCCGGTGCCCCGTGGCTTCCGAGGCCCTGACTGCCCGCCAGATCCCTGCCTC AGCAGCCCTTGTGCCCACGGTGCCCGCTGCTCAGTGGGGCCCGATGGACGCTTCCTCTGCTCCTGCCCACCTGGC CTCAACACCTGGCTCCTTCCGCTGCCAGTGTCCAGCTGGCTACACAGGGCCACTATGTGAGAACCCCGCGGTG CTTCCTGGGTTTGAGGGTCAGAATTGTGAAGTGAACGTGGACGACTGTCCAGGACACCGATGTCTCAATGGGGGG ACATGCGTGGATGGCGTCAACACCTATAACTGCCAGTGCCCTCCTGAGTGGACAGGCCAGTTCTGCACGGAGGAC GTGGATGAGTGTCAGCTGCAGCCCAACGCCTGCCACAATGGGGGTACCTGCTTCAACACGCTGGGTGGCCACAGC TGCGTGTGTGTCAATGGCTGGACAGGTGAGAGCTGCAGTCAGAATATCGATGACTGTGCCACAGCCGTGTGCTTC CACCTGGATGACGCCTGTCAGCAACCCCTGCCACGAGGATGCTATCTGTGACACAAATCCGGTGAACGGCCGG GCCATTTGCACCTGTCCTCCCGGCTTCACGGGTGGGGCATGTGACCAGGATGTGGACGAGTGCTCTATCGGCGCC GGACCTCGCTGTGAGACCGATGTCAACGAGTGTCTGTCGGGGCCCTGCCGAAACCAGGCCACGTGCCTCGACCGC ATAGGCCAGTTCACCTGTATCTGTATGGCAGGCTTCACAGGAACCTATTGCGAGGTGGACATTGACGAGTGTCAG AGTAGCCCCTGTGTCAACGGTGGGGTCTGCAAGGACCGAGTCAATGGCTTCAGCTGCACCTGCCCCTCGGGCTTC AGCGGCTCCACGTGTCAGCTGGACGTGGACGAATGCGCCAGCACGCCCTGCAGGAATGCGCCCAAATGCGTGGAC CAGCCCGATGGCTACGAGTGCCGCTGTGCCGAGGGCTTTGAGGGCACGCTGTGTGATCGCAACGTGGACGACTGC $ext{TCCCCTGACCCATGCCACCATGGTCGCTGCGTGGATGGCATCGCCAGCTTCTCATGTGCCTGTGCTCCTGGCTAC}$ CTGGTGGACAAGTACCTCTGCCGCTGCCCTTCTGGGACCACAGGTGTGAACTGCGAAGTGAACATTGACGACTGT GCCAGCAACCCCTGCACCTTTGGAGTCTGCCGTGATGGCATCAACCGCTACGACTGTGTCTGCCAACCTGGCTTC GGGGAAAATGGCTTCCGCTGCCCTGCCCGCCTGGCTCCTTGCCCCCACTCTGCCTCCCCCGAGCCATCCCTGT AGTGGCCCCGCTGCAGCCAGAGCCTGGCCCGAGACGCCTGTGAGTCCCAGCCGTGCAGGGCCGGTGGGACATGC AGCAGCGATGGAATGGGTTTCCACTGCACCTGCCCGCCTGGTGTCCAGGGACGTCAGTGTGAACTCCTCTCCCCC TGCACCCGAACCCCTGTGAGCATGGGGGCCGCTGCGAGTCTGCCCCTGGCCAGCTGCCTGTCTGCTCCTGCCCC $\tt CAGGGCTGGCAAGGCCCACGATGCCAGCAGGATGTGGACGAGTGTGCTGGCCCCGCACCCTGTGGCCCTCATGGT$ ATCTGCACCAACCTGGCAGGGAGTTTCAGCTGCACCTGCCATGGAGGGTACACTGGCCCTTCCTGTGATCAGGAC ATCAATGACTGTGACCCCAACCCATGCCTGAACGGTGGCTCGTGCCAAGACGGCGTGGGCTCCTTTTCCTGCTCC TGCCTCCTGGTTTCGCCGGCCCACGATGCGCCCGCGATGTGGATGAGTGCCTGAGCAACCCCTGCGGCCCGGGC ACCTGTACCGACCACGTGGCCTCCTTCACCTGCACCTGCCCGCCGGGCTACGGAGGCTTCCACTGCGAACAGGAC CTGCCCGACTGCAGCCCCAGCTCCTGCTTCAATGGCGGGACCTGTGTGGACGGCGTGAACTCGTTCAGCTGCCTG TGCCGTCCCGGCTACACAGGAGCCCACTGCCAACATGAGGCAGACCCCTGCCTCTCGCGGCCCTGCCTACACGGG GGCGTCTGCAGCGCCCCCCCCCTGGCTTCCGCTGCACCTGCCTCGAGAGCTTCACGGGCCCGCAGTGCCAGACG CTGGTGGATTGGTGCAGCCGCCAGCCTTGTCAAAACGGGGGTCGCTGCGTCCAGACTGGGGCCTATTGCCTTTGT CCCCTGGATGGAGCGGACGCCTCTGTGACATCCGAAGCTTGCCCTGCAGGGAGGCCGCAGCCCAGATCGGGGTG CGGCTGGAGCAGCTGTGTCAGGCGGGTGGGCAGTGTGTGGATGAAGACAGCTCCCACTACTGCGTGTGCCCAGAG GGCCGTACTGGTAGCCACTGTGAGCAGGAGGTGGACCCCTGCTTGGCCCAGCCCTGCCAGCATGGGGGGACCTGC GAGTGTGCCTCCCAGCCCTGCCAGCACGGGGGTTCATGCATTGACCTCGTGGCCCGCTATCTCTGCTCCTGTCCC ${\tt CCAGGAACGCTGGGGGTGCTCTGCGAGATTAATGAGGATGACTGCGGCCCAGGCCCACCGCTGGACTCAGGGCCCCCCCGGGCCCAGGCCAGGCCAGGCAGGCAGGCAGGCCAGGCAGGCCAGGCCCAGGCCAGGCCAGGCAGGCCCAGGCCAGGCCCAGGCCCA$

762/2825 FIGURE 673B

GACCCAGGCGGAGGTTTCCGTTGCCTTTGTCATGCTGGCTTCTCAGGTCCTCGCTGTCAGACTGTCCTGTCTCCC TGCGAGTCCCAGCCATGCCAGCATGGAGGCCAGTGCCGTCCTAGCCCGGGTCCTGGGGGTGGGCTGACCTTCACC TGTCACTGTGCCCAGCCGTTCTGGGGTCCGCGTTGCGAGCGGGTGGCGCGCTCCTGCCGGGAGCTGCAGTGCCCG GTGGGCGTCCCATGCCAGCAGACGCCCCGCGGGCCGCTGCCCCTGCCCCCCAGGGTTGTCGGGACCCTCCTGC CGCAGCTTCCCGGGGTCGCCGCGGGGGCCAGCAACGCCAGCTGCGCGGCCCCCCTGTCTCCACGGGGGCTCC TGCCGCCCCGCGCCCCTTCTTCCGCTGCGCTTGCGCGCAGGGCTGGACCGGGCCGCGCTGCGAGGCG CGCTGCGACCGCGAGTGCAACAGCCCAGGCTGCGGCTGGGACGGCGGCGACTGCTCGCTGAGCGTGGGCGACCCC TGGCGGCAATGCGAGGCGCTGCAGTGCTGGCGCCTCTTCAACAACAGCCGCTGCGACCCCGCCTGCAGCTCGCCC GCCTGCCTCTACGACACTTCGACTGCCACGCCGGTGGCCGCGAGCGCACTTGCAACCCGGTGTACGAGAAGTAC TGCGCCGACCACTTTGCCGACGGCCGCTGCGACCAGGGCTGCAACACGGAGGAGTGCGGCTGGGATGGGCTGGAT TGTGCCAGCGAGGTGCCGGCCCTGCTGGCCCGCGGCGTGCTGCTCACAGTGCTGCTGCCGCCGGAGGAGCTA CTGCGTTCCAGCGCCGACTTTCTGCAGCGGCTCAGCGCCATCCTGCGCACCTCGCTGCGCTTCCGCCTGGACGCG CACGGCCAGGCCATGGTCTTCCCTTACCACCGGCCTAGTCCTGGCTCCGAACCCCGGGCCCGTCGGGAGCTGGCC TGCTTCCCCGATGCCCAGAGCGCCGCTGACTACCTGGGAGCGTTGTCAGCGGTGGAGCGCCTGGACTTCCCGTAC GGCGCTGTCTTGCTGCTGGTCATTCTCGTCCTGGGTGTCATGGTGGCCCGGCGCAAGCGCGAGCACAGCACCCTC TGGTTCCCTGAGGGCTTCTCACTGCACAAGGACGTGGCCTCTGGTCACAAGGGCCGGCGGGAACCCGTGGGCCAG GAGTGCCCAGAGGCCAAGCGGCTAAAGGTAGAGGAGCCAGGCATGGGGGGCTGAGGAGGCTGTGGATTGCCGTCAG TGGACTCAACACCATCTGGTTGCTGACATCCGCGTGGCACCAGCCATGGCACTGACACCACCACGGGCGAC GGGGGGCTCTGGAGCCAATGCCAACTGAAGAGGATGAGGCAGATGACACATCAGCTAGCATCATCTCCGACCTG ATCTGCCAGGGGGCTCAGCTTGGGGCACGGACTGACCGTACTGGCGAGACTGCTTTGCACCTGGCTGCCCGTTAT GCCCGTGCTGATGCAGCCAAGCGGCTGCTGGATGCTGGGGCAGACACCAATGCCCAGGACCACTCAGGCCGCACT CCCCTGCACACAGCTGTCACAGCCGATGCCCAGGGTGTCTTCCAGATTCTCATCCGAAACCGCTCTACAGACTTG GATGCCCGCATGGCAGATGGCTCAACGGCACTGATCCTGGCGGCCCCTGGCAGTAGAGGGCATGGTGGAAGAG CTCATCGCCAGCCATGCTGATGTCAATGCTGTGGATGAGCTTGGGAAATCAGCCTTACACTGGGCTGCGGCTGTG AACAACGTGGAAGCCACTTTGGCCCTGCTCAAAAATGGAGCCAATAAGGACATGCAGGATAGCAAGGAGGAGACC ATCACCGACCACCTGGACAGGCTGCCGCGGGACGTAGCCCAGGAGAGACTGCACCAGGACATCGTGCGCTTGCTG GATCAACCCAGTGGGCCCCGCAGCCCCCCGGTCCCCACGGCCTGGGGCCTCTGCTCTGTCCTCCAGGGGCCTTC CTCCTGGCCTCAAAGCGGCACAGTCGGGGTCCAAGAAGAGCAGGAGGCCCCCCGGGAAGGCGGGGCTGGGGCCG CAGGGGCCCCGGGGGCAAGAAGCTGACGCTGGCCTGCCCGGGCCCCCTGGCTGACAGCTCGGTCACGCTG GGGCCCTATGCAGCTGCCACTGCAGTGTCTCTGGCACAGCTTGGTGGCCCAGGCCGGCAGGTCTAGGG CGCCAGCCCCTGGAGGATGTGTACTCAGCCTGGGCCTGCTGAACCCTGTGGCTGTGCCCCTCGATTGGGCCCGG CTGCCCCCACCTGCCCTCCAGGCCCCTCGTTCCTGCTGCCACTGGCGCCGGGACCCCAGCTGCTCAACCCAGGG ACCCCGTCTCCCCGCAGGAGCGGCCCCCGCCTTACCTGGCAGTCCCAGGACATGGCGAGGAGTACCCGGTGGCT GGGGCACACAGCAGCCCCCAAAGGCCCGCTTCCTGCGGGTTCCCAGTGAGCACCCTTACCTGACCCCATCCCC ACTGCCACTGGGGCCATGGCCACCACCACTGGGGCACTGCCCAGCCACTTCCCTTGTCTGTTCCCAGCTCC CTTGCTCAGGCCCAGACCCAGCTGGGGCCCCAGCCGGAAGTTACCCCCAAGAGGCAAGTGTTGGCCTGAGACGCT TTAGTCTTTTCATCCTCTTCTCTTTCCACCAACCCTCCTGCATCCTTGCCTTGCAGCGTGACCGAGATAGGTCA

763/2825 FIGURE 673C

764/2825 FIGURE 674

MGPGARGRRRRPMSPPPPPPPVRALPLLLLLAGPGAAAPPCLDGSPCANGGRCTQLPSREAACLCPPGWVGER CQLEDPCHSGPCAGRGVCOSSVVAGTARFSCRCPRGFRGPDCSLPDPCLSSPCAHGARCSVGPDGRFLCSCPPGY QGRSCRSDVDECRVGEPCRHGGTCLNTPGSFRCQCPAGYTGPLCENPAVPCAPSPCRNGGTCROSGDLTYDCACL ${\tt PGFEGQNCEVNVDDCPGHRCLNGGTCVDGVNTYNCQCPPEWTGQFCTEDVDECQLQPNACHNGGTCFNTLGGHSC}$ VCVNGWTGESCSQNIDDCATAVCFHGATCHDRVASFYCACPMGKTGLLCHLDDACVSNPCHEDAICDTNPVNGRA ICTCPPGFTGGACDQDVDECSIGANPCEHLGRCVNTQGSFLCQCGRGYTGPRCETDVNECLSGPCRNQATCLDRI ${\tt GQFTCICMAGFTGTYCEVDIDECQSSPCVNGGVCKDRVNGFSCTCPSGFSGSTCQLDVDECASTPCRNGAKCVDQ}$ PDGYECRCAEGFEGTLCDRNVDDCSPDPCHHGRCVDGIASFSCACAPGYTGTRCESQVDECRSQPCRHGGKCLDL VDKYLCRCPSGTTGVNCEVNIDDCASNPCTFGVCRDGINRYDCVCQPGFTGPLCNVEINECASSPCGEGGSCVDG ENGFRCLCPPGSLPPLCLPPSHPCAHEPCSHGICYDAPGGFRCVCEPGWSGPRCSQSLARDACESQPCRAGGTCS SDGMGFHCTCPPGVQGRQCELLSPCTPNPCEHGGRCESAPGQLPVCSCPQGWQGPRCQQDVDECAGPAPCGPHGI CTNLAGSFSCTCHGGYTGPSCDQDINDCDPNPCLNGGSCQDGVGSFSCSCLPGFAGPRCARDVDECLSNPCGPGT $\verb|CTDHVASFTCTCPPGYGGFHCEQDLPDCSPSSCFNGGTCVDGVNSFSCLCRPGYTGAHCQHEADPCLSRPCLHGG| \\$ VCSAAHPGFRCTCLESFTGPQCQTLVDWCSRQPCQNGGRCVQTGAYCLCPPGWSGRLCDIRSLPCREAAAQIGVR $\verb|LEQLCQAGGQCVDEDSSHYCVCPEGRTGSHCEQEVDPCLAQPCQHGGTCRGYMGGYMCECLPGYNGDNCEDDVDE|$ CASQPCQHGGSCIDLVARYLCSCPPGTLGVLCEINEDDCGPGPPLDSGPRCLHNGTCVDLVGGFRCTCPPGYTGL RCEADINECRSGACHAAHTRDCLQDPGGGFRCLCHAGFSGPRCQTVLSPCESQPCQHGGQCRPSPGPGGGLTFTC HCAQPFWGPRCERVARSCRELQCPVGVPCQQTPRGPRCACPPGLSGPSCRSFPGSPPGASNASCAAAPCLHGGSC RPAPLAPFFRCACAQGWTGPRCEAPAAAPEVSEEPRCPRAACQAKRGDQRCDRECNSPGCGWDGGDCSLSVGDPW RQCEALQCWRLFNNSRCDPACSSPACLYDNFDCHAGGRERTCNPVYEKYCADHFADGRCDOGCNTEECGWDGLDC ASEVPALLARGVLVLTVLLPPEELLRSSADFLQRLSAILRTSLRFRLDAHGQAMVFPYHRPSPGSEPRARRELAP EVIGSVVMLEIDNRLCLQSPENDHCFPDAQSAADYLGALSAVERLDFPYPLRDVRGEPLEPPEPSVPLLPLLVAG AVLLLVILVLGVMVARRKREHSTLWFPEGFSLHKDVASGHKGRREPVGODALGMKNMAKGESLMGEVATDWMDTE CPEAKRLKVEEPGMGAEEAVDCRQWTQHHLVAADIRVAPAMALTPPQGDADADGMDVNVRGPDGFTPLMLASFCG GALEPMPTEEDEADDTSASIISDLICQGAQLGARTDRTGETALHLAARYARADAAKRLLDAGADTNAQDHSGRTP . LHTAVTADAQGVFQILIRNRSTDLDARMADGSTALILAARLAVEGMVEELIASHADVNAVDELGKSALHWAAAVN NVEATLALLKNGANKDMQDSKEETPLFLAAREGSYEAAKLLLDHFANREI

765/2825 FIGURE 675

AGGAAATGGTTTCTGGAAAACGTTAGTAAGGTCAGTTTTTAAACACTGAATCCAAGGTTGTCTTCTGGAATATCC AAATTGGTTATGACCAGAATGTGATTCATTATACTAAGCTAAAGGAATAGATTAAAGAATTAGCAACAGTGGCCG TTGAGACCAGCCTGGCCAACATGGTGAAACCTAAAAATACAAAAATTAGCCAGGTGTGGTGGCAGGTGCTTGTAA ACCATTGCACTCCAGCCTGGGTGGCAGAGTGAGACTCTGTCTCAAAAATTAAAAAGCAACAGTGTATATGCAATA GTTGCAAGATGTAAGATCACCCAAAGAGTATGCAGAGGGAAATGAGGGACAGAACCCAGAAATATTAATACCCAG GGAGTGAACAGGAGGACCCCAAGAAGTTACTGAGTCAGATTTTTCCCACTCATCCAGGTGAAAGTTTAGGTC TTGGAGGGATATTTTGAAAGGCAAGGTGATATTAAACTTTATTCTGAAAGTAGTTTGTTAGAGAAAGAGGCATGA TAAGAGTTGCAGTTAACTGATTGGAAACTATGCAGCAGATGAAACTGGAATAAAGGAAACTCATCAGGAAATGAT TATAGTAATAAGGGCCAGAAATAAGGGCTTGCTTGCCTGAACTAAAAACAAAGAGGATACAAAGGTTCTAGAAAT ATTTCAAAGGAATTAGCTTTAATTCAGCAATACTCATTGAGAATCACCTATGCACCTGGCTCTGAAGATGAAGTG $\tt CTGAGTAAACTTAGACATGGACCCTGCTATCATGGAGATGGCAGATTATTGGTCAGAATGCTCTTACCTGTCATT$ GTAGCAATTTTGTTAGATCCTTAATACCTCTGAATTGCTAATAAACTTGTTTTGGCTGAAAAAATAGTCCTGTGA ATTTTACCATGCAGTTAAATAAGAAACTAAAAGCAAACCTAAATACCACCAAAAAGGTTAGTAGTCTGTTATATG CATTAGCCTTAATCTAAGGAAATATTTTATTATAGGTCTCCTTGAAGAAAATGATATTTTCAGGAATGCTCAAGC AGGTGTTCTCATCAGCACTAATAGTCATCCAATCTTAAGGAAAAACAGAATATTTGATGGATTTGCCGCAGGTAT TGAAATTACAAATCACGCAACTGCAACACTAGAAGGCAATCAGATTTTTAACAACCGGTTTGGAGGCTTATTTTT TAACACCACAGATCGAAATGCCATATGTGTGAACTGCATTAAGAAGTGCCATCAGGGACATGATGTAGAGTTTAT TAGACATGATAGGTATGTAGCACACTTGCTTGATATATTACCCAATTACTTTCCCCCTCACTTTTCTAATATTTG GGTTTCATTTTGCTTTAGGTTTTTCTGTGACTGTGGTGCTGGAACACTGTCTAATCCTTGTACATTAGCTGGTGA GCCTACACATGATACAGATACACTATATGACTCTGCTCCACCTATAGAATCTAATACATTGCAGCACAACTGAAT TCCTTCCCTAAAGAAAAGTCCTGCCATTGTAACATCATAACTTAAAACACTTTTTTGGAAGAAGATTTAAAATA TTTGCCCATGCTACAGGAAGAGACTGTATTAAAAATGGATACACAAGGTCAGTTGACACTATGAAGCTCAAGCTA CCAAAAAGAAAGTGGCAATATATTGACTCAGGATCTCAAAGCTGGGTGTTTTAGCATTACTGTGTAAAGACTTGA AGGGACAGAAGTGAAGAAATAAGCTGCAATTTTGTACAGATACCAACTTCTGAAAAGCTGGTGTTTTTACAACT AGCATTGAATGCAGTCCAATTTGCAGTAGTAATCTTCAATAGACAAGCAGCTTTGTTGCTGCCTTTATGGACATG TACTGTACTTGAATGTGCCCTGTTTTGTTAGCACACCTAGACTTGCTGTAACTGTACTCATGTCCCAGTATGTAC GTTCTTTCTATGAAAGAGAAAACACTAATCTTAAATTATATCCAGCAATGTTTCTGGTATCCTTTAAGAAAAGTT CTTCCTAGGAAGGGATGCACTGTAAAACAAAAGTATTCTTGTAACTCAGTTTTGTGAAAGGTAAAAAAACTACTAT AACAGTTTAGACAAACTGTTGGAAATTAAACCAATTTCCTGCATTAAGCTGAGACAAGTATATAAACAGCCCTA TACAGTTTCATAGCTTTTCCTCCCCCATTTATGTGTATTGGTGACAGTGGGTATAAAACAGCCTGAAAGTGTATG CATGTACCATAACATTTAGACTTAATATTGTGGAGTATTCAATAACCATTATGTAGAAGGTAGATAAGAATTA AAAGGGTTTAATTTCCTAGAAAGAAAATGGAAAAATGGTCATTTTTAAAAAAATAAAGTTTATTAGATCATAATGT GTCAGCAATTTATGGACAGCTTCAGCATTTACAGTTGACCTTTCACTAGCCAGGCAAACTTCCCTTAAAATTAAA

766/2825 **FIGURE 676**

 ${\tt MKDNKIMNNQDAIEKAVSRGQCLYKISSYTSYPMHDFYRCHTCNTTDRNAICVNCIKKCHQGHDVEFIRHDRYVA\\ {\tt HLLDILPNYFPPHFSNIWVSFCFRFFCDCGAGTLSNPCTLAGEPTHDTDTLYDSAPPIESNTLQHN}$

767/2825 FIGURE 677

GAATTCGCCTCGATGGCGTTTATCCGGAAGAAGCAGCAGGAGCAGCAGCTGCAGCTCTACTCCAAGGAGAAGTTT TCCTTGCTGCTGCTTAACTTGGAGGAGTACTACTTTGAACAGCATAGAGCCAATCACATTTTGCACAAGGGCAGT CACCATGAAAGGAAAATCAGAGGCTCCTTAAAAATATGTTCAAAAATCGGTGATTTTTGAACCAGATTCAATATCC CAGCCCATCATCAAGATTCCTTTGAGAGACTGTATAAAAATAGGAAAGCATGGAGAAAATGGAGCCAATAGACAC GCACCATATAAAATAGAAAGGGGCAAAATGGAATATGTTTTTGAATTGGATGTTCCCGGGAAAGTGGAAGATGTT GTGGAGACGTTGCTTCAGCTTCACAGAGCATCCTGCCTTGACAAATTGGGTGACCAAACCGCCATGATAACAGCT ATTTTGCAGTCTCGTTTAGCTAGAACATCATTTGACAAAAACAGGTTCCAAAACATTTCTGAAAAGCTGCACATG GAATGCAAAGCAGAAATGGTGACGCCTCTGGTGACTAATCCTGGACACGTGTGCATCACGGACACAAACCTGTAT TTTCAGCCCCTCAACGGCTACCCGAAACCTGTGGTCCAGATAACACTCCAAGATGTCCGCCGCATCTACAAAAGG AGGCACGGCCTCATGCCTCTGGGCTTGGAAGTATTTTTGCACAGAAGATGATCTGTTTCCGACATCTACCTAAAG TTCTATGAACCTCAAGATAGAGATGATCTCTATTTTTACATTGCCACATACCTAGAGCACCATGTGGCGGAGCAC ACTGCTGAGAGCTACATGCTGCAGTGGCAGCGTGGACACCTTTCCAACTATCAGTACCTCCTTCACCTCAACAAC CTGGCCGACCGCAGCTGCAACGACCTCTCCCAGTACCCTGTGTTTCCATGGATAATACATGATTATTCCAGCTCA GAACTAGATTTGTCAAATCCAGGAACCTTCCGGGATCTCAGTAAGCCAGTAGGGGCCCTAAATAAGGAACGGCTG GAGAGACTACTGACACGCTACCAGGAAATGCCTGAACCAAAGTTCATGTATGGGAGTCACTACTCTTCCCCGGGT TATGTACTTTTTATCTTGTTAGGATTGCACCAGAGTATATGCTGTGCCTGCAGAATGGAAGATTTGATAATGCA GATAGAATGTTCAACAGTATTGCAGAAACTTGGAAAAACTGTCTGGATGGTGCAACGGATTTTAAAGAGTTAATT CCAGAATTCTATGGTGATGTGAGCTTTCTAGTCAATAGCCTGAAGTTGGATTTGGGAAAGAGACAAGGAGGA CAGATGGTTGACGACGTGGAGCTTCCCCCTTGGGCTTCCAGTCCCGAGGACTTTCTCCAGAAGAGCAAAGATGCA GATGCAGTTGGGGCCCATAATGTATTTCATCCCCTGACCTATGAAGGAGGTGTAGACTTGAACAGCATCCAGGAT CCTGATGAGAAGGTAGCCATGCTTACGCAAATCTTGGAATTTGGGCAGACACCAAAACAACTATTTGTGACACCA CATCCTCGAAGGATCACCCCAAAGTTTAAAAGTTTGTCCCAGACCTCCAGTTATAATGCTTCTATGGCAGATTCC CCAGGTGAAGAGTCTTTTGAAGACCTGACCGAAGAAAGCAAAACACTGGCCTGGAATAACATCACCAAACTGCAG TTACACGAGCACTATAAAATCCACAAAGAAGCAGTTACTGGAATCACGGTCTCTCGCAATGGATCTTCAGTATTC ACAACATCCCAAGATTCCACCTTGAAGATGTTTTCTAAAGAATCAAAAATGCTACAAAGAAGTATATCATTTTCA AATATGGCTTTATCGTCTTGTTTACCTTTTACCAGGAGATGCCACTGTCATAACTTCTTCATGGGATAATAATGTC TATTTTTATTCCATAGCATTTGGAAGACGCCAGGACACGTTAATGGGACATGATGATGCTGTTAGTAAGATCTGT TGGCATGACAACAGGCTATATTCTGCATCGTGGGACTCTACAGTGAAGGTGTGGTCTGGTGTTCCTGCAGAGATG CCAGGCACCAAAAGACACCACTTTGACTTGCTGGCCGAGCTGGAACATGATGTCAGTTGAGATACAATCAGTTTA AATGCTGCAAGCACTGTTAGTTTCCGGCACCAAAGAAGGCACAGTGAATATTTGGGACCTCACAACGGCCACC TTAATGCACCAGATTCCATGCCATTCAGGGATTGTATGTGACACTGCTTTTAGCCCAGATAGTCGCCATGTCCTC AGCACAGGAACAGATGGCTGTCTTAATGTCATTGATGTGCAGACAGGAATGCTCATCTCCTCCATGACATCAGAT $\texttt{CAGTGTAGCAGTATCATCACAGGAGGGGAAGACAGACAAATTATATTCTGGAAATTGCAGTAT\\ \textbf{TAA} \texttt{GTGCCTTTT}$ CCTCTCCTGAATATTAAATTGAACTCTATTTAATGCATTTTTAAACCAAACTTTTAAACGGACTGGTGAATGTGC AATGTTAGTAATTAGAAGTTTTACCACATGGAAAATTTGTGGTTTTAAACTTTCTAAATCATGGTGACTTCATTG AAAGCCATTAGTTGCCATTCTCTTAGGGCAGATAAAATGCGGCTGTGTTAGGAAAAACATGTTACACTGTAAGGC AGATGATCGTCCCCGTATGATGATTGTCAGAAGACAGGACTAAGTAGCAGAGAATAGCTAAGAGATAAATTGGGC TGGGGAAACTTGTCAGAAAGCACTGAACAATTAAGAAATTTTCCAAGAAAATGTGCAGTATTCTCTGCTACTTCT GAATCTGTTTTGTCTTCCTAATCTATCACAATTGCCACCCATCGGGTTTTGGGTGTGTTTTCATAGCGTGGTT ACTTTCTATAATGCTGTACCCAGATTCTAAGAACCTGGAGAAGGATTAGCAGTTCTTAGTAAGTTTACTGTGTAT AAAAA

768/2825 FIGURE 678

MAFIRKKQQEQQLQLYSKERFSLLLLNLEEYYFEQHRANHILHKGSHHERKIRGSLKICSKSVIFEPDSISQPII
KIPLRDCIKIGKHGENGANRHFTKAKSGGISLIFSQVYFIKEHNVVAPYKIERGKMEYVFELDVPGKVEDVVETL
LQLHRASCLDKLGDQTAMITAILQSRLARTSFDKNRFQNISEKLHMECKAEMVTPLVTNPGHVCITDTNLYFQPL
NGYPKPVVQITLQDVRRIYKRRHGLMPLGLEVFCTEDDLCSDIYLKFYEPQDRDDLYFYIATYLEHHVAEHTAES
YMLQWQRGHLSNYQYLLHLNNLADRSCNDLSQYPVFPWIIHDYSSSELDLSNPGTFRDLSKPVGALNKERLERLL
TRYQEMPEPKFMYGSHYSSPGYVLFYLVRIAPEYMLCLQNGRFDNADRMFNSIAETWKNCLDGATDFKELIPEFY
GDDVSFLVNSLKLDLGKRQGGQMVDDVELPPWASSPEDFLQKSKDALESNYVSEHLHEWIDLIFGYKQKGSDAVG
AHNVFHPLTYEGGVDLNSIQDPDEKVAMLTQILEFGQTPKQLFVTPHPRRITPKFKSLSQTSSYNASMADSPGEE
SFEDLTEESKTLAWNNITKLQLHEHYKIHKEAVTGITVSRNGSSVFTTSQDSTLKMFSKESKMLQRSISFSNMAL
SSCLLLPGDATVITSSWDNNVYFYSIAFGRRQDTLMGHDDAVSKICWHDNRLYSASWDSTVKVWSGVPAEMPGTK
RHHFDLLAELEHDVSVDTISLNAASTLLVSGTKEGTVNIWDLTTATLMHQIPCHSGIVCDTAFSPDSRHVLSTGT
DGCLNVIDVQTGMLISSMTSDEPQTCFVWDGNSVLSGSQSGELLVWDLLGAKISERIQGHTGAVTCIWMNEQCSS
IITGGEDRQIIFWKLQY

769/2825 FIGURE 6**79**

TGAAGAAGGGCGGCGGTGGGGCCGGGACGGAGTCCGCTCCGGGCCCTCGGGCCAGAGCGTGGCCCCCA TACCACAGCCGCCTGCGGAATCCGAATCTGGGTCCGAGTCGGAGCCGGACGCAGGCCCAGGCCCAGGCCGGGCC CGCTGCAGAGGAAGCAGCCGATCGGGCCGGAGGACGTGCTGGGGCTGCAGCGGATCACCGGTGACTACCTCTGCT $\verb|CCCCTGAGGAGAATATCTACAAGATCGACTTTGTCAGGTTTAAGATTCGGGACATGGACTCAGGCACTGTCCTCT| \\$ TTGAAATCAAGAAGCCCCCAGTCTCAGAACGGTTGCCCATCAACCGGCGGGACCTGGACCCCAATGCTGGGCGCT TTGTCCGCTACCAGTTCACGCCTGCCTTCCTCCGCCTGAGGCCAGGTGGGAGCCACGGTGGAGTTCACAGTGGGAG ACAAGCCTGTCAACAACTTCCGCATGATCGAGAGGCACTACTTCCGCAACCAGCTACTCAAAAGCTTCGACTTCC ACTTTGGCTTCTGCATCCCCAGCAGCAGAACACCTGCGAGCACATTTACGACTTCCCCCCTCTCTCCGAGGAGC TGATCAGCGAGATGATCCGCCACCCGTATGAGACCCAGTCTGACAGCTTCTACTTCGTGGATGACCGGCTGGTGA ${\tt TGCACAATAAAGCAGACTATTCCTACAGCGGGACACCC} {\tt TGACCCCAGGGCTGCCCTGACCCCAGGAGGCTCCAGT}$ TCTGGGCTGGGAGCTGTGACCTCCCCAACGCTCACCCCTCAACCCCAAGTCCTCTGCTTGGGGAGTTCTCCAGGA GCTCCGGACCCTGAGTCAATGTTGGGAGGAAGGGTACCTGGTGTCCCCAGTCAAGCCCATGAAGCCCATGCGGCC TGCTACATGGGGTGGGTCGTAGGGAGGCTGTTTGCCTCCACGTCTAGGAAGGCCTGTGAGAGGCAGTCAGGA ATCAGGCAGGGATCCATTCCCTGTCCCCTGCCCACTACCTTCAGGCCATTTAGAGTTGTAAATTTACAAAGATCC ACGGTGGGCTCCAGCTGCCAAGCCACCCAAGGGAGTCTGGGCCCTAGGCCCTAGCCCCATCCCCCATGAGGGG CCAAGACACTGCCTAAGGTGTGGGAGGGACTGGCTGAGATTGCAGCCCATGGTAGGAGCTGGACCAACTGTATAT

770/2825 FIGURE 680

 $\label{thm:constraint} $$ MKVKKGGGGAGTATESAPGPSGQSVAPIPQPPAESESGSESEPDAGPGPRPGPLQRKQPIGPEDVLGLQRITGDY $$ LCSPEENIYKIDFVRFKIRDMDSGTVLFEIKKPPVSERLPINRRDLDPNAGRFVRYQFTPAFLRLRQVGATVEFT $$ VGDKPVNNFRMIERHYFRNQLLKSFDFHFGFCIPSSKNTCEHIYDFPPLSEELISEMIRHPYETQSDSFYFVDDR $$ LVMHNKADYSYSGTP$$

771/2825 FIGURE 681

ATGCCGACTGCGACCCCGTGCCGCGGGTGGGGCAGCCGCTGGCGGCCCCACCACGCCGCTGAGCCCCACG CGCCTGTCGCGGCTCCAGGAGAAGGAGGAGCTGCGCGAGCTCAATGACCGGCTGGCGGTGTACATCGACAAGGTG CGCAGCCTGGAGACGGGGGCGCGCTGCAGCTGCAGGTGACGGAGCGCGGAGGAGGTGCGCGGCCGTGAGCTC GCCAAGCTGCAGATCGAGCTGGGCAAGTGCAAGGCGGAACACGACCAGCTGCTCCTCAACTATGCTAAGAAGGAA TCTGATCTTAATGGCGCCCAGATCAAGCTTCGAGAATATGAAGCAGCACTGAATTCGAAAGATGCAGCTCTTGCT ACTGCACTTGGTGACAAAAAAGTTTAGAGGGAGATTTGGAGGATCTGAAGGATCAGATTGCCCAGTTGGAAGCC TCCTTAGCTGCAGCCAAAAAACAGTTAGCAGATGAAACTTTACTTAAAGTAGATTTGGAGAATCGTTGTCAGAGC CGCTTGGTAGAGGTGGATTCTGGGCGTCAAATTGAGTATGAGTACAAGCTGGCGCAAGCCCTTCATGAGATGAGA GAGCAACATGATGCCCAAGTGAGGCTGTATAAGGAGGAGCTGGAGCAGACTTACCATGCCAAACTTGAGAATGCC AGACTGTCATCAGAGATGAATACTTCTACTGTCAACAGTGCCAGGGAAGAACTGATGGAAAGCCGCATGAGAATT GAGAGCCTTTCATCCCAGCTTTCTAATCTACAGAAAGAGTCTAGAGCATGTTTGGAAAGGATTCAAGAATTAGAG GATCAAATGCAGCAACAGCTGAATGACTATGAACAGCTTCTTGATGTAAAGTTAGCCCTGGACATGGAAATCAGT GCTTACAGGAAACTCTTAGAAGGCGAAGAAGAGGGTTGAAGCTGTCTCCAAGCCCTTCTTCCCGTGTGACAGTA TCCCGAGCATCCTCAAGTCGTAGTGTACGTACAACTAGAGGGAAAGCGGAAGAGGGTTGATGTGGAAGAATCAGAG GCGAGTAGTAGTGTTAGCATCTCTCATTCCGCCTCAGCCACTGGAAAATGTTTGCATCGAAGAAATTGATGTTGAT GGGAAATTTATCCGCTTGAAGAACACTTCTGAACAGGATCAACCAATGGGAGGCTGGGAGATGATCAGAAAAATT GCAAACGCTGGTGTCACAGCCAGCCCCCAACTGACCTCATCTGGAAGAACCAGAACTCGTGGGGCACTGGCGAA GATGTGAAGGTTATATTGAAAAATTCTCAGGGAGAGGAGGTTGCTCAAAGAAGTACAGTCTTTAAAACAACCATA CCTGAAGAAGAGGGGGGGGGAAGAAGCAGCTGGAGTGGTTGTTGAGGAAGAACTTTTCCACCAGCAGGGAACC CCAAGAGCATCCAATAGAAGCTGTGCAATTATG**TAA**AATTTTCAACTGTCTTCCTCAAAATAAAGAAGTATGGTA ATCTTTACCTGTATACAGTGCAGAGCCTTCTCAGAAGCACAGAATATTTTTATATTTTCCTTTATGTGAATTTTTA AGCTGCAAATCTGATGGCCTTAATTTCCTTTTTGACACTGAAAGTTTTGTAAAAGAAATCATGTCCATACACTTT GTTGCAAGATGTGAATTATTGACACTGAACTTAATAACTGTGTACTGTTCGGAAGGGGTTCCTCAAATTTTTTGA TATAATTTTTTTAAAATAGAAATTTTGTAAGAAGGCAATATTAACCTAATCACCATGTAAGCACTCTGGATGAT GTGGAGGGAGGGAAGGGTTTCTCTATTAAAATGCATTCGTTGTGTTTTTTAAGATAGTGTAACTTGCTTAAATTT CTTATGTGACATTAACAAATAAAAAAGCTCTTTT

772/2825 FIGURE 682

MATATPVPPRMGSRAGGPTTPLSPTRLSRLQEKEELRELNDRLAVYIDKVRSLETENSALQLQVTEREEVRGREL TGLKALYETELADARRALDDTARERAKLQIELGKCKAEHDQLLLNYAKKESDLNGAQIKLREYEAALNSKDAALA TALGDKKSLEGDLEDLKDQIAQLEASLAAAKKQLADETLLKVDLENRCQSLTEDLEFRKSMYEEEINETRRKHET RLVEVDSGRQIEYEYKLAQALHEMREQHDAQVRLYKEELEQTYHAKLENARLSSEMNTSTVNSAREELMESRMRI ESLSSQLSNLQKESRACLERIQELEDLLAKEKDNSRRMLTDKEREMAEIRDQMQQQLNDYEQLLDVKLALDMEIS AYRKLLEGEEERLKLSPSPSSRVTVSRASSSRSVRTTRGKRKRVDVEESEASSSVSISHSASATGNVCIEEIDVD GKFIRLKNTSEQDQPMGGWEMIRKIGDTSVSYKYTSRYVLKAGQTVTIWAANAGVTASPPTDLIWKNQNSWGTGE DVKVILKNSQGEEVAQRSTVFKTTIPEEEEEEEEEAAGVVVEEELFHQQGTPRASNRSCAIM

773/2825 FIGURE 683A

 $\tt GGGCTAGAGAGCTGAAGGAGAGCCAGTTTCCCCAAAATTGGACTTCTCAGAACCTTTAATATGCTAATGTGCATT$ GTGAATCTCCAAGAGGGGGATATGATATGCAGCATTCTTGAATACTTCTAATGACAGGGAGCCCACTACCTCATA AGCTGCAGTGAGAAGAGGAGTTTGTTACTTTAAACAGAGGCTGAAGAAACTATAGAATTAGCAGAGAAAGTGGAG $\texttt{AAGGTAGAGG} \underline{\textbf{ATG}} \texttt{GAGTTGCAGACTCTACAGGAGGCTCTTAAAGTGGAAATTCAGGTTCACCAGAAACTGGTTGC}$ TCAAATGAAGCAGGATCCACAGAATGCTGACTTAAAGAAACAGCTTCATGAACTCCAAGCCAAAATCACAGCTTT GAGTGAGAAACAGAAAAGAGTAGTTGAACAGCTACGGAAGAACCTGATAGTAAAGCAAGAACAACCGGACAAGTT CCAAATACAGCCATTGCCACAATCTGAAAACAAACTACAAACAGCACCAGCAGCAACCACTACAGCAACTACAACA TGTAACTACAGCTTCTATGATTACCACAAAGACACTACCTCTCGTCTTGAAAGCAGCAACTGCGACCATGCCTGC TGTGCAGAACACCAGTCAACCTCCAGACGTCTAGTAAGGTCACTGGGCCTGGGGCAGAGGCTGTCCAAATTGT GGCAAAAAACACAGTCACTCTGCAGGTTCAGGCAACACCTCCTCAGCCCATCAAAGTACCACAGTTTATCCCCCC TCCTAGACTCACTCCACGTCCAAACTTTCTTCCACAGGTTCGACCCAAGCCTGTGGCCCAGAATAACATTCCTAT TGCCCCAGCACCACCTCCCATGCTCGCAGCTCCTCAGCTTATCCAGAGGCCCGTCATGCTGACCAAGTTCACCCC AACGTTCCCCATGGCCCAGCTCACCAGCATTGTGATAGCTACTCCAGGGACCAGACTCGCTGGACCTCAAACTGT CCACACCATCACCCCACCTGCTGCACCCAAACCAAAACGGGAGGAGAACCCTCAGAAACTTGCCTTCATGGTGTC TCTAGGGTTGGTAACACATGACCATCTAGAAGAAATCCAAAGCAAGAGGCAAGAGCGAAAAAAGAAGAACAACAGC AAATCCGGTCTACAGTGGAGCAGTCTTTGAGCCAGAGCGTAAGAAGAGTGCAGTGACATACCTAAACAGCACAAT GCACCCTGGGACCCGGAAGAGCCCAATGAGGAACACTGGCCAAAGGGTGATATTCATGAGGATTTTTGCAGCGT TTGCAGAAAAAGTGGCCAGTTACTGATGTGCGACACGTGTTCCCGTGTATATCATTTGGACTGCTTAGACCCCCC TCCATGGCCTGGAACTTTAGCAATTGTTCATTCCTATATTGCCTACAAAGCAGCAAAAGAAGAAGAAAACAGAA GTTACTTAAATGGAGTTCAGATTTAAAACAAGAACGAGAACAACTAGAGCAAAAGGTGAAACAGCTCAGCAATTC CATAAGTAAATGCATGGAAATGAAGAACACCATCCTGGCCCGGCAGAAGGAGTGCACAGCTCCCTGGAGAAGGT AAAACAGCTGATTCGCCTCATCCACGGCATCGACCTCTCCAAACCTGTAGACTCTGAGGCCACTGTGGGGGCCAT GGCAAGGAGAACACTGAAGACTCTAGAAAAGCAAAGCCGGATTTCTGGAAAGTGCAGAATTCTTTTGGTT $\verb|CTTTGGTTCCAGAGAGAGAGAGAGATGCTTGTGCCAGGTGGCACCAGAGTTTGCCAATTGATCCTTCTTATTCTGT| \\$ GTGTACATGCAAAGATTGGACCATGTTACATGAAATAGTGCCAGCTGGAGGTTCTTTGCCAGCACCATGCCAAGT GAAATAATATTTTACTCTCTTATTATACACCAGTGTGTGCCTGCAGCAGCCTCCACAGCCACGATGGGTTTGT TTTGTTTAGGTAGAGAAGACAAGTCCAAAGAGTGTGTGGGCTTTCCTGTTTCTAAACTTTCGCTACTATAAAACC GGGACAGTGTATCAAATAAGCAGTATTTAATCACCTCTGGCGGGGGCCTCGTGCAAGGGGAGACTGACACCAAGA ACAGCCAGTAGGTTCTTCTCCCCTGCACTCTGCTCCCTGCGCGGTAACCCCACCACTCCTGAAGCCTGCCCAGTC TCCTTCCTTCCCTGCTTGGTGAGTCGCGCATCTCCGTGGTTATCCCGCTGTCTCCTCTCCAAGAACAAGCAGAGC ATTTTACTTGAAAACAAGCTCCATCCCTTTTCTATATTATAAGAAGAGAAGATCTTGAGTGAAGCAGCACGCGA AAGGAAAGTTTTATTTTACTGTTCATTTTACTTTCTTGGTAACAAAAACTAAAATAAGGAATAGAAAAGCTGTTT TTCAGGCTGACAGTCCAATTAAGGGTAGCCAAGACCTTGCATGGTAGAGTAGGAATCATAGTGTCAGTGAGGTCC ${\tt CGTGAGTCTTTGTGAGTCCTTGTGTCATCGTTCGGGCACTGTTTTTTTATGCAAGGGCAAAAATCTTTGTATCTG}$ GGGAAAAAAACTTTTTTTTAAATTAAAAAGGAAAATAAAAGATATTGAGGTCTTCCTAGTGTTACTTAAATTAA

774/2825 **FIGURE 683B**

 ${\tt GATCAAGGTAAGAAACATTGTAAAAAAAAATTACAAAAGTGCTATTTGTTTCCTAAAAACAGTGATTTCTATTAAAAAGGTGTCAGAACTGG}$

775/2825 FIGURE 684

MELQTLQEALKVEIQVHQKLVAQMKQDPQNADLKKQLHELQAKITALSEKQKRVVEQLRKNLIVKQEQPDKFQIQ
PLPQSENKLQTAQQQPLQQLQQQQQYHHHHAQQSAAASPNLTASQKTVTTASMITTKTLPLVLKAATATMPASVV
GQRPTIAMVTAINSQKAVLSTDVQNTPVNLQTSSKVTGPGAEAVQIVAKNTVTLQVQATPPQPIKVPQFIPPPRL
TPRPNFLPQVRPKPVAQNNIPIAPAPPPMLAAPQLIQRPVMLTKFTPTTLPTSQNSIHPVRVVNGQTATIAKTFP
MAQLTSIVIATPGTRLAGPQTVQLSKPSLEKQTVKSHTETDEKQTESHTITPPAAPKPKREENPQKLAFMVSLGL
VTHDHLEEIQSKRQERKRRTTANPVYSGAVFEPERKKSAVTYLNSTMHPGTRKRANEEHWPKGDIHEDFCSVCRK
SGQLLMCDTCSRVYHLDCLDPPLKTIPKGMWICPRCQDQMLKKEEAIPWPGTLAIVHSYIAYKAAKEEEKQKLLK
WSSDLKQEREQLEQKVKQLSNSISKCMEMKNTILARQKEMHSSLEKVKQLIRLIHGIDLSKPVDSEATVGAISNG
PDCTPPANAATSTPAPSPSSQSCTANCNQGEETK

776/2825 **FIGURE 685**

GTCCCAGCTAGAGCTCCAGCCCCGCTCAGGCCCCACTCGACCCTCTCGGGCCTCGGCTACTTGGACTGCGGCGG AATATGCCGCTCCGATGACTCCCGCGGCTCGGCCCGAGGACTACGAGGCGCGCTCAATGCCGCCCTGGCTGAC GTGCCCGAACTGGCCAGACTCCTGGAGATCGACCCGTACTTGAAGCCCTACGCCGTGGACTTCCAGCGCAGGTAT TCATTTGGCGTCCACAGATGTGCTGATGGTGGTTTATACTCCAAAGAATGGGCCCCGGGAGCAGAAGGAGTTTTT CTTACTGGAGATTTTAATGGTTGGAATCCATTTTCGTACCCATACAAAAAACTGGATTATGGAAAATGGGAGCTG TATATCCCACCAAAGCAGAATAAATCTGTACTCGTGCCTCATGGATCCAAATTAAAGGTAGTTATTACTAGTAAA AGCGGAGAGATCTTGTATCGTATTTCACCGTGGGCAAAGTATGTGGTTCGTGAAGGTGATAATGTGAATTATGAT TGGATACACTGGGATCCAGAACACTCATATGAGTTTAAGCATTCCAGACCAAAGAAGCCACGGAGTCTAAGAATT TATGAATCTCATGTGGGAATTTCTTCCCATGAAGGAAAAGTAGCTTCTTATAAACATTTTACATGCAATGTACTA ${\tt CCAAGAATCAAAGGCCTTGGATACAACTGCATTCAGTTGATGGCAATCATGGAGCATGCTTACTATGCCAGCTTT}$ GGTTACCAAATCACAAGCTTCTTTGCAGCTTCCAGCCGTTATGGAACACCTGAAGAGCTACAAGAACTGGTAGAC ACAGCTCATTCCATGGGTATCATAGTCCTCTTAGATGTGGTACACAGCCATGCTTCAAAAAATTCAGCAGATGGA TTGAATATGTTTGATGGGACAGATTCCTGTTATTTTCATTCTGGACCTAGAGGGACTCATGATCTTTGGGATAGC AGATTGTTTGCCTACTCCAGCTGGGAAGTTTTAAGATTCCTTCTGTCAAACATAAGATGGTGGTTGGAAGAATAT CGCTTTGATGGATTTCGTTTTGATGGTGTTACGTCCATGCTTTATCATCACCATGGAGTGGGTCAAGGTTTCTCA GGTGATTACAGTGAATATTTCGGACTACAAGTAGATGAAGATGCCTTGACTTACCTCATGTTGGCAAATCATTTG GTTCACACGCTGTGTCCCGATTCTATAACAATAGCTGAGGATGTATCAGGAATGCCAGCTCTGTGCTCTCCAATT TCCCAGGGAGGGGGTGGTTTTGACTATCGACTAGCCATGGCAATTCCAGATAAGTGGATTCAGCTACTTAAAGAG TTTAAAGATGAAGACTGGAACATGGGCGATATAGTATACACGCTCACAAACAGGCGCTACCTTGAAAAGTGCATT TATACAAACATGAGTGTCCTGACTCCTTTTACTCCAGTTATTGATCGTGGAATACAGCTTCATAAAATGATTCGA CTCATTACGCATGGGCTTGGTGGAGAAGGCTATCTCAATTTCATGGGTAATGAATTTGGGCATCCTGAATGGTTA GACTTCCCAAGAAAAGGAAATAATGAGAGTTACCATTATGCCAGGCGGCAGTTTCATTTAACTGACGACGACCTT CCACAGGCCTACGTGAAGAAAACATGAAGGCAATAAGATCATTGCTTTTGAAAGAGCAGGTCTTCTTTTCATT TTCAACTTCCATCCAAGCAAGAGCTACACTGACTACCGAGTTGGAACAGCATTGCCAGGGAAATTCAAAATTGTG CTAGATTCAGATGCAGCGGAATATGGAGGGCATCAGAGACTGGACCACAGCACTGACTTTTTTCTGAGGCTTTT GAACATAATGGGCGTCCCTATTCTCTTTTGGTGTACATTCCAAGCAGAGTGGCCCTCATCCTTCAGAATGTGGAT CACAGCTTATAACATGTATGCTTTTCAGAATACAGTTGTCTAGCCAAGCCATCAAGTGTCTGAAATTCAATATTG GTTTATGCAAATACAGCAAACTTTTATTTAAGTAGATAGGAGAATATGTTTAAAATATTAGGAATCCTAGACCAT CCTGGCTAATTATTTGATCCTTTTAAATCCAAATTTGAATCATTTGTCATGTATGATTATTTCTGTTAAATGTAC ACAGTATTTAAGATGGATATTTGGTGGCTCTATTTGTTCTGATATCTTTTTGGTCTAAATTATGAGGTACCAAGAT TATCCAAGGTAATATAAAAGCCATTACGTATGAACTCATCCGTGTCTCATTTTGTGTTTTATTTTGTGATCTCTT GTCCACTAAGTATCTTGTTAAATGCCAGTATCTCAGTCTTTCTGAAGCCCTGAAATGGTAATTGTAGCATTTCAG

777/2825 FIGURE 686

MAAPMTPAARPEDYEAALNAALADVPELARLLEIDPYLKPYAVDFQRRYKQFSQILKNIGENEGGIDKFSRGYES FGVHRCADGGLYSKEWAPGAEGVFLTGDFNGWNPFSYPYKKLDYGKWELYIPPKQNKSVLVPHGSKLKVVITSKS GEILYRISPWAKYVVREGDNVNYDWIHWDPEHSYEFKHSRPKKPRSLRIYESHVGISSHEGKVASYKHFTCNVLP RIKGLGYNCIQLMAIMEHAYYASFGYQITSFFAASSRYGTPEELQELVDTAHSMGIIVLLDVVHSHASKNSADGL NMFDGTDSCYFHSGPRGTHDLWDSRLFAYSSWEVLRFLLSNIRWWLEEYRFDGFRFDGVTSMLYHHHGVGQGFSG DYSEYFGLQVDEDALTYLMLANHLVHTLCPDSITIAEDVSGMPALCSPISQGGGGFDYRLAMAIPDKWIQLLKEF KDEDWNMGDIVYTLTNRRYLEKCIAYAESHDQALVGDKSLAFWLMDAEMYTNMSVLTPFTPVIDRGIQLHKMIRL ITHGLGGEGYLNFMGNEFGHPEWLDFPRKGNNESYHYARRQFHLTDDDLLRYKFLNNFDRDMNRLEERYGWLAAP QAYVSEKHEGNKIIAFERAGLLFIFNFHPSKSYTDYRVGTALPGKFKIVLDSDAAEYGGHQRLDHSTDFFSEAFE HNGRPYSLLVYIPSRVALILQNVDLPN

778/2825 FIGURE 687

GCCTATTGCAGTTTATGTTGCTTTTTAGTCGTCAGGGAAAGCTTCGACTGCAAAAATGGTATGTCCCACTATCAG ACAAAGAGAAAAAAGATCACAAGAGAACTTGTTCAGACCGTTTTAGCACGGAAACCTAAAATGTGCAGCTTCC TTGAGTGGCGAGATCTGAAGATTGTTTACAAAAGATATGCTAGTCTGTATTTTTGCTGTGCTATTGAGGATCAGG ACAATGAACTAATTACCCTGGAAATAATTCATCGTTATGTGGAATTACTTGACAAGTATTTCGGCAGTGTCTGTG AACTAGATATCATCTTTAATTTTGAGAAGGCTTATTTTATTTTGGATGAGTTTCTTTTTGGGAGGGGAAGTTCAGG AAACATCCAAGAAAAATGTCCTTAAAGCAATTGAGCAGGCTGATCTACTGCAGGAGGAAGGCAGAAACCCCAC $\texttt{GTAGTGTTCTTGAAGAAATTGGACTGACA} \underline{\textbf{TAA}} \texttt{CTCTCCTCCCTTGTTGATGACTTCTTGTGGCATTTCACACACT}$ GTAGATGGTCACTCCCTTCATTGTCCATTGTTAGCTCATGGTGTAAGATGATGTCTTGTCAGTATTACTGTTTTG AATATGAATTAGAATGGTGCAGAAAGAGATACCTTTTCTGGATATTTTAAAGTTTAAAGGTCAGTTTCTCTTAAT ATTTGACAAAGGAAACTCTTAAATTATAATGTGAAACCTGGTTTTATGAAACCAAAGACTAGTGCAGCATTTCAG AATGACTAAATTGGAGTGATACTTCTTACACTAAAAATTATTTCTTAGGCATTCTGAATCTGGGATGAGAAACAG GATTGTTCACAATAGTAAGCACATAATTTTTAAGGCCCAAGGCACATTTGACTCCTGAGATGAATTTTTTTGTGGT CATAATCAAATACTTAGTTGTTTTTGATGCCCCAAAATAAAGTGAGAATGGTAATTTGCCAGGAATTCTTCATAA CAGTATCTTACAAAAAACGTGTTGCTCTCTCACAGTATTATGTGTAAAGTCATTGTTTAAAGCACGAATGTTCC CTCTGGGGTACTTGTTAAAGCTAAATTTATTTTGCTTCCCTCCACTTAGAAGTGCTGCACACTTTACAGCAGCTT CCTTTCTTTCCATGGCACTGCCTAGTTAACAGAAGTCTTATAAAAATTTAAAAAGACACATTTCTTACAAAAAAG AGTTGAATGAGGTAAAATGGCATTAGATGGCTCTATATTTTTTAAAGCTATGTAATTGTTCAGCGTCACTTTTCT AAGTACTTATACATATCTAAACATGTCTTCAATGGTTTATATTTTCACTTATAATATGCTGGGCTGGATTAAGCT TTGTTGTGAATTGTGACCCAACATTCAGGCCAACGTTGAGCACTGTCCTTATCACATCTCGCCACAATTAGTTGT AATAAACCGTTCAACGTACAAACGTACAAACACTGGAGTGTGTTTTTATCTCTTTTCCAAAAGTTTGTCAAACTAT GCAGAGCTGCTGAAGGAAGAATTTCTCATTTTTTTTTCAGTAAAATGTTGAAAATTCCCCTCCATTTGAATATGG TGGTTGTTATAAGCACACACAAGATACATGGTGGAAGATCTAAGGAGTCTTCATGTACTTCATTAAAAAATAACA

779/2825 FIGURE 688

MDRGFPFAAAVAAASPRARSCGLLQFMLLFSRQGKLRLQKWYVPLSDKEKKKITRELVQTVLARKPKMCSFLÉWR DLKIVYKRYASLYFCCAIEDQDNELITLEIIHRYVELLDKYFGSVCELDIIFNFEKAYFILDEFLLGGEVQETSK KNVLKAIEQADLLQEEEAETPRSVLEEIGLT

780/2825 FIGURE 689

CCTAAGCCTGCCCTATGCCAGGCGGGTGTCCTCCCCACAGCACCACGGCTTCTCTTCCTCAGCACGGCGACAGGG GCTTCCCCTTCGCCGCCGCCGCCGCCGCCGCCCAAGCTCCGCCGCCGCCGCCGCCGCCGCCGCCCATGCAGTTTA AGATCACAAGAGAACTTGTTCAGACCGTTTTAGCACGGAAACCTAAAATGTGCAGCTTCCTTGAGTGGCGAGATC TGAAGATTGTTTACAAAAGATATGCTAGTCTGTATTTTTGCTGTGCTATTGAGGATCAGGACAATGAACTAATTA CCCTGGAAATAATTCATCGTTATGTGGAATTACTTGACAAGTATTTCGGCAGTGTCTGTGAACTAGATATCATCT TTAATTTTGAGAAGGCTTATTTTATTTTGGATGAGTTTCTTTTGGGAGGGGAAGTTCAGGAAACATCCAAGAAAA ATGTCCTTAAAGCAATTGAGCAGGCTGATCTACTGCAGGAGGAAGCTGAAACCCCACGTAGTGTTCTTGAAGAAA $\tt TTGGACTGACA{\color{blue}TAAC}CTCTCCCTTGTTGATGACTTCTTGTGGCATTTCACACACTGTAGATGGTCACTCCCTT$ CTACACAATTTTTTTTAAAAGGGAACTTTAGTTAATTAAGTGATAAGGGACTTAAATATGAATTAGAATGGTGC AGAAAGAGATACCTTTTCTGGATATTTTAAAGTTTAAAGGTCAGTTTCTCTTAATCTGATTATGTGCACATATGA AAGGGAATTGACATGTCACATATCAAATGAATGGAAACTTTGTTGAAACTTTAAAAAAGCAAATTTACTCCAAAGA CTTGTATTGGAAATTACATACCTTTTTTTTTTTTTTTAAAGGACTACAGATTATTTTTAATGACTAAATTGGAG TGATACTTCTTACACTAAAAATTATTTCTTAGGCATTCTGAATCTGGGATGAGAAACAGGATTGTTTCACAATAG TAAGCACATAATTTTTAAGGCCAAGGCACATTTGACTCCTGAGATGAATTTTTTTGTGGTCATAATCAAATACTTA GTTGTTTTTGATGCCCCAAAATAAAGTGAGAATGGTAATTTGCCAGGAATTCTTCATAACAGTATCTTACAAAAA ACGTGTTGCTCTCTCACAGTATTATGTGTAAAGTCATTGTTTAAAGCACGAATGTTCCCTCTGGGGTACTTGTT ACTGCCTAGTTAACAGAAGTCTTATAAAAATTTAAAAAGACACATTTCTTACAAAAAAGAGTTGAATGAGGTAAA ATGGCATTAGATGGCTCTATATTTTTTAAAGCTATGTAATTGTTCAGCGTCACTTTTCTAAGTACTTATACATAT CTAAACATGTCTTCATGGTTTATATTTTCACTTATATATGCTGGGCTGGATTAAGCTTTGTTGTGATTGTGACCA ACATTCAGGCCACGTGAGCACTGTCTTATCACATCGCCAATTAGTTGTAATAAACGTTCAACGTACAAACACTGG GATCTAAGGAGTCTTCATGTACTTCATTAAAAAATAACATGGATTCCATACTGAGAGCCTATCTACACATTTATT TTCAATCAATAAATGCTGCTTTTAAAACCTTGA

781/2825 **FIGURE 690**

 ${\tt MDRGFPFAAAVAAASPRARSCGLLQFMLLFSRQGKLRLQKWYVPLSDKEKKKITRELVQTVLARKPKMCSFLEWR} \\ {\tt DLKIVYKRYASLYFCCAIEDQDNELITLEIIHRYVELLDKYFGSVCELDIIFNFEKAYFILDEFLLGGEVQETSK} \\ {\tt KNVLKAIEQADLLQEEEAETPRSVLEEIGLT} \\$

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782/2825 FIGURE 691

GGAGGCCAGTGCGCGGCGCGCTGCTCTACCGGCGTGTCGCTCCGCCCCAGGGAGAGCCGGCGCTACC**ATG**GAGG AGTACCATCGCCACTGCGACGAGGTTGGCTTCAATGCTGAGGGAAGCCCACAATATTGTCAAAGAGTGTGTAGATG GGGTTTTAGGTGGTGAAGATTATAATCACAACAACATCAACCAGTGGACTGCAAGCATAGTGGAACAATCCTTAA CACACCTGGTTAAGTTGGGAAAAGCCTATAAATATATTGTGACCTGTGCAGTGGTCCAGAAGAGCGCATATGGCT TTCACACAGCCAGCTCCTGTTTTTGGGATACCACATCTGATGGAACCTGTACCGTAAGATGGGAGAACCGGACCA TGAACTGTATTGTCAACGTTTTTGCCATTGCTATTGTTCTT**TAA**CTGACTAAAAATGTTGGGCTAAAGCCATTAA CTTAAGAATTTGTCAGTGTATCCTTTCCAAAAAGAGTAATAGTTGTTTACTAGTGTGCTAGATGAAAAGCGTGCA AAATACAATCTTATATTTACACCAGCTTTTCACTAATATTTTTGTACCTAAGGTGATGGGGAACTCCATTCAGATA GAAAATGATGAGAATTAGCTAACATTTTTAAGTTTTTTTAAACTTTCTTCCCCTCAGTTGTACTTAATATTTAGT GGAAAGTAATAATTTTTTTATTTTCTATCAACTAATAGTATAGTAACAACTATGATTAACTTGTTTACTTTTTCT GAGGATTAGTAAATCAATTTTTTTTAATTTCAAATTTTGGATTTACACTTGAGGGTAAATTAAATCTGGTAAACT GAATTTCCTAGTTAAATAAAATTAGTTGCAGTATATGATGAACAGTGTATGACTCAAACAGCTGCCTTACAATTC ACTCATTCCATGTGGAACAACATTTATCAGATGCCTATTATGGGCATATGTCTCTGCTAAGCACCATAGTTGTC AGAAAGTAGTTGTTTTACAAGGGAGGAAAAAAGTGAATCTGGTTACACATATGGAAGTAAGCAAAATGAAAAGCA CTTATTGCTTTCTGACAGAATTATAGATGTAATTTTAAGAGTTGCTCCTAGCAAGTTAAAAGTGCATATAAAATA ACCATCTGTAAATAACTTAAAAGACTTATTATGTGGGGTTCAAATTGAGTGGAATAAAGTATAGATTAAAAGTAT ACAATCCTTAGCACGTTATCTCAGGGCTTATGAAATGTAATTAAATTTATTAAGAAAAATAGATGAAAAATTAGGG CTAACACTAATACATATAGAGAGCGGAACCATAACTCATTGAATTTTGGAGAGGAATAAGCTTAGCGTTAATATT ATTGTTCAATGTTTAAGAATAATATTAACAAAATAAAGGAGTTTAATGCAGTGATCTTTGTTTTTTGGCACATCAA AAATTCTCAGTCATTATTCATGTTTCTTTTATGCTGCTGGCTTTTGTGCCCTGGAAGATCATAATAGTGACCAAA TGCTATCTGCTCTGTTTCTAGTTAAAATATAATAATATTATCTTCCTGTGCTGTA

783/2825 **FIGURE 692**

 ${\tt MEEYHRHCDEVGFNAEEAHNIVKECVDGVLGGEDYNHNNINQWTASIVEQSLTHLVKLGKAYKYIVTCAVVQKSAYGFHTASSCFWDTTSDGTCTVRWENRTMNCIVNVFAIAIVL}$

784/2825 FIGURE 693A

CTTTCCCGAGTCCGTTTGAGGAAGTCCCCGAGGCGCACAGAGCCACGCGAGGGCACCTCTGGAGGGGAGC CCAATAACTCTAATGCAGCGGAAGATGACCTGCCCACAGTGGAGCTTCAGGGCGTGGTGCCCCGGGGCGTCAACC TGCAAGAGTTTCTTAATGTCACGAGCGTTCACCTGTTCAAGGAGAGATGGGACACTAACAAGGTGGACCACCACA CTGACAAGTATGAAAACAACAAGCTGATTGTCCGCAGAGGGCAGTCTTTCTATGTGCAGATTGACCTCAGTCGTC CATATGACCCCAGAAGGGATCTCTTCAGGGTGGAATACGTCATTGGTCGCTACCCACAGGAGAACAAGGGAACCT CCTATGGCGTACTTCGAACCAGTCGAAACCCAGAAACAGACACGTACATTCTCTTCAATCCTTGGTGTGAAGATG AGGTCAATGACATCAAGACCAGAAGCTGGAGCTATGGTCAGTTTGAAGATGGCATCCTGGACACTTGCCTGTATG TGATGGACAGAGCACAAATGGACCTCTCTGGAAGAGGGAATCCCATCAAAGTCAGCCGTGTGGGGTCTGCAATGG TGAATGCCAAAGATGACGAAGGTGTCCTCGTTGGATCCTGGGACAATATCTATGCCTATGGCGTCCCCCCATCGG CCTGGACTGGAAGCGTTGACATTCTATTGGAATACCGGAGCTCTGAGAATCCAGTCCGGTATGGCCAATGCTGGG TTTTTGCTGGTGTCTTTAACACATTTTTACGATGCCTTGGAATACCAGCAAGAATTGTTACCAATTATTTCTCTG CCCATGATAATGATGCCAATTTGCAAATGGACATCTTCCTGGAAGAAGATGGGAACGTGAATTCCAAACTCACCA AGGATTCAGTGTGGAACTACCACTGCTGGAATGAAGCATGGATGACAAGGCCTGACCTTCCTGTTGGATTTGGAG GCTGGCAAGCTGTGGACAGCACCCCCCAGGAAAATAGCGATGGCATGTATCGGTGTGGCCCCGCCTCGGTTCAAG CCATCAAGCACGGCCATGTCTGCTTCCAATTTGATGCACCTTTTTGTTTTTTGCAGAGGTCAACAGCGACCTCATTT CCAAACAAATTGGAGGAGATGGCATGATGGATATTACTGATACTTACAAATTCCAAGAAGGTCAAGAAGAAGAGA GATTGGCCCTAGAAACTGCCCTGATGTACGGAGCTAAAAAGCCCCTCAACACAGAAGGTGTCATGAAATCAAGGT CCAACGTTGACATGGACTTTGAAGTGGAAAATGCTGTGCTGGGAAAAGACTTCAAGCTCTCCATCACCTTCCGGA ACAACAGCCACAACCGTTACACCATCACAGCTTATCTCTCAGCCAACATCACCTTCTACACCGGGGTCCCGAAGG GGGATGTTCTGGCCAAGCAAAAGTCCACCGTGCTAACCATCCCTGAGATCATCATCAAGGTCCGTGGCACTCAGG TAGTTGGTTCTGACATGACAGTTCAGTTTACCAATCCTTTAAAAGAAACCCTGCGAAATGTCTGGGTAC ACCTGGATGGTCCTGGAGTAACAAGACCAATGAAGAAGATGTTCCGTGAAATCCGGCCCAACTCCACCGTGCAGT GGGAAGAGTGTGCCGGCCCTGGGTCTCTGGGCATCGGAAGCTGATAGCCAGCATGAGCAGTGACTCCCTGAGAC ATGTGTATGGCGAGCTGGACGTTCAAAGACGACCTTCCATG**TGA**ATGCACAGGAAGCTGAGATGAACCC TGGCATTTGGCCTCTTGTAGTCTTGGCTAAGGAAATTCTAACGCAAAAATAGCTCTTGCTTTGACTTAGGTGTGA AGACCCAGACAGGACTGCAGAGGGCCCCAGAGTGGAGATCCCACATATTTCAAAAACATACTTTTCCAAACCCAG TCATAGCTCATAAGAGTAACAGTCATCATTTATCATCACAAATGGCTACATCTCCAAATATCAGTGGGCTCTCTT ACCAGGGAGATTTGCTCAATACCTGGCCTCATTTAAAACAAGACTTCAGATTCCCCACTCAGCCTTTTGGGAATA ATAGCACATGATTTGGGCTCTAGAATTCCAGTCCCCTTTCTCGGGGTCAGGTTCTACCCTCCATGTGAGAATATT TTTCCCAGGACTAGAGCACATAATTTTTATTTTTGGCAAAGCCAGAAAAAGATCTTTCATTTTGCACCTGCA GCCAAGCAAATGCCTGCCAAATTTTAGATTTACCTTGTTAGAAGAGGTGGCCCCATATTAACAAATTGCATTTGT GGGAAACTTAACCACCTACAAGGAGATAAGAAAGCAGGTGCAACACTCAAGTCTATTGAATAATGTAGTTTTGTG ATGCATTTTATAGAATGTGTCACACTGTGGCCTGATCAGCAGGAGCCAATATCCCTTACTTTAACCCTTTCTGGG ATCTCCTTTGCAGAATGATGCAGGTTCAGGTCCCCTTTCAGAGATATAATAAGCCCAACAAGTTGAAGAAGCTGG CGGATCTAGTGACCAGATATATAGAAGGACTGCAGCCACTGATTCTCTCTTGTCCTTCACATCACCATTTTGAGA CCTCAGCTTGGCACTCAGGTGCTGAAGGGTAATATGGACTCAGCCTTGCAAATAGCCAGTGCTAGTTCTGACCCA AAGGCTGATTTATGGTCAGAATTTCCCTCTGATATGTCTAGGGTGATTTAGGTCAGTAGACTGTGATTCTTAG CAAAAAATGAACAGTGATAAGTATACTGGGGGCAAAATCAGAATGGAATGCTCTGGTCTATATAACCACATTTCT

785/2825 FIGURE 693B

786/2825 **FIGURE 694**

MSETSRTAFGGRRAVPPNNSNAAEDDLPTVELQGVVPRGVNLQEFLNVTSVHLFKERWDTNKVDHHTDKYENNKL IVRRGQSFYVQIDLSRPYDPRRDLFRVEYVIGRYPQENKGTYIPVPIVSELQSGKWGAKIVMREDRSVRLSIQSS PKCIVGKFRMYVAVWTPYGVLRTSRNPETDTYILFNPWCEDDAVYLDNEKEREEYVLNDIGVIFYGEVNDIKTRS WSYGQFEDGILDTCLYVMDRAQMDLSGRGNPIKVSRVGSAMVNAKDDEGVLVGSWDNIYAYGVPPSAWTGSVDIL LEYRSSENPVRYGQCWVFAGVFNTFLRCLGIPARIVTNYFSAHDNDANLQMDIFLEEDGNVNSKLTKDSVWNYHC WNEAWMTRPDLPVGFGGWQAVDSTPQENSDGMYRCGPASVQAIKHGHVCFQFDAPFVFAEVNSDLIYITAKKDGT HVVENVDATHIGKLIVTKQIGGDGMMDITDTYKFQEGQEEERLALETALMYGAKKPLNTEGVMKSRSNVDMDFEV ENAVLGKDFKLSITFRNNSHNRYTITAYLSANITFYTGVPKAEFKKETFDVTLEPLSFKKEAVLIQAGEYMGQLL EQASLHFFVTARINETRDVLAKQKSTVLTIPEIIIKVRGTQVVGSDMTVTVQFTNPLKETLRNVWVHLDGPGVTR PMKKMFREIRPNSTVQWEEVCRPWVSGHRKLIASMSSDSLRHVYGELDVQIQRRPSM

787/2825 FIGURE 695

GCCCGCTGCGGTAAATGGGGCAGAGGCCGGGAGGGGTGGGGGTTCCCCGCGCCGCAGCCATCGAGCAGCCTTCGCG $\verb|CCGCCGCCGTCTGCAGATTGTTCTGGGCCACCTCGGCCGCCCCTCGGCCGGGGCTGTCGTAGCTCATCCCACTT| \\$ CAGGGACTATTTCCTCTGCCAGTTTCCATCCTCAACAATTCCAGTATACTCTGGATAATAATGTTCTAACCCTGG AACAGAGAAAATTTTATGAAGAAAATGGGTTTCTAGTAATCAAAAATCTTGTACCTGATGCCGATATTCAACGCT TTCGGAATGAGTTTGAAAAAATCTGCAGAAAGGAGGTGAAACCATTAGGATTAACAGTAATGAGAGATGTGACCA TTTCGAAATCCGAATATGCTCCAAGTGAGAAGATGATCACGAAGGTCCAGGATTTCCAGGAAGATAAGGAGCTCT TCAGATACTGCACTCTCCCCGAGATTCTGAAATATGTGGAGTGCTTCACTGGACCTAATATTATGGCCATGCACA CAATGTTGATAAACAAACCTCCAGATTCTGGCAAGAAGACGTCCCGTCACCCCTGCACCAGGACCTGCACTATT TCCCCTTCAGGCCCAGCGATCTCATCGTTTGCGCCTGGACGGCGATGGAGCACATCAGCCGGAACAACGGCTGTC AAATGTTCCACGGGATCCAGGACTACGAGGAAAACAAGGCCCGGGTGCACCTGGTGATGGAGAAGGGCGACACTG TTTTCTTCCATCCTTTGCTCATCCACGGATCTGGTCAGAATAAAACCCAGGGATTCCGGAAGGCAATTTCCTGCC GAATAGCACATAAATTCTTTGGAGCTGAAAATAGCGTGAACTTGAAGGATATTTGGATGTTTCGAGCTCGACTTG TGAAAGGAGAAGAACCAATCTT**TGA**AATAGCCATCTGCTATAACTCTTTCAACAGAAAACCAAAACCAAACGAA ATGTCTAAGGAAAATGTTTTCTTAATGAGATGATGTAACCTTTTCTATCACTTGTTAAAAGCAGAAAACATGTAT AAATCAATTTCTTTCATTCAGTTAGCTCTTTACCCAAGAAGAAGTGAATGATTTGGAGCTTAGGGTATGTTTTGT ATCCCCTTTCTGATAAACCCATTCCCTACCAATTTTATGTCATAAGAGATTTTTTTCCCCCAAATCTAGAACAAT GTATAATACATTCACATCTAGTCAAGGGCATAGGAACGGTGTCATGGAGTCCAAATAAAGTGGATATTCCTGCTC GG

788/2825 **FIGURE 696**

MEQLRAAARLQIVLGHLGRPSAGAVVAHPTSGTISSASFHPQQFQYTLDNNVLTLEQRKFYEENGFLVIKNLVPD ADIQRFRNEFEKICRKEVKPLGLTVMRDVTISKSEYAPSEKMITKVQDFQEDKELFRYCTLPEILKYVECFTGPN IMAMHTMLINKPPDSGKKTSRHPLHQDLHYFPFRPSDLIVCAWTAMEHISRNNGCLVVLPGTHKGSLKPHDYPKW EGGVNKMFHGIQDYEENKARVHLVMEKGDTVFFHPLLIHGSGQNKTQGFRKAISCHFASADCHYIDVKGTSQENI EKEVVGIAHKFFGAENSVNLKDIWMFRARLVKGERTNL

789/2825 FIGURE **697**

GCGGACGTGGCCAGGGGCTGGAAAAGCCGGCGCTGGAGCGGGAACGGGAGTAGCTGCCTGGGCGCCCAAAGGCC GCGGCACTCCCACGCGGACCCCGAAGTCCGCAACCCGGGGATGGGCCCGCGGCTGCGAGGGGATCTTCTCTGGAT ${ t CAAGCAATGGTGGTGAAAA}$ CAGTACTAAGAGCAAGTCTGTGGATTCTAGCCTTGGGGGTCTTTCACGATCCAGCACTGTGGCCAGCCTCGACAC AGATTCCACCAAAAGCTCAGGACAAAGCAACAATAATTCAGATACCTGTGCAGAATTTCGAATAAAATATGTTGG TGCCATTGAGAAACTGAAACTCTCCGAGGGAAAAGGCCTTGAAGGGCCATTAGACCTGATAAATTATATAGACGT TGCCCAGCAAGATGGAAAGTTGCCTTTTGTTCCTCCGGAGGAAGAATTTATTATGGGAGTTTCCAAGTATGGCAT AAAAGTATCAACATCAGATCAATATGATGTTTTGCACAGGCATGCTCTCTACTTAATAATCCGGATGGTGTTTA GTGGGTTTATCAGTGCAACAGCCTGGAACAAGCACAAGCCATTTGCAAGGTTTTATCCACCGCTTTTGACTCTGT ${\tt ATTAACATCTGAGAAACCC} {\textbf{TGA}} {\tt ATCCTGCAATCAAGTAGAAGTCAACTTCATCTGAAAGTTCAGCTGTTTTCAAA$ CTGCAATGCTGAAATGTTATGCAAATAATGAAGTTATCCCTTGCTCTAGATTTTCTGAAGAAAATGGATTGTGTA AAATGCTGATCATTTGTTTATTAAAATGTGTCCTATTACACAGTGAGTTAACTCTCAATGAAGTCATCTATTTTC AGAGGTCCACTCAGTGACAAACACACTGAAGGCCTGAGGGAAGACTGAGGACATGGGCTCAGTGGTGGCTTCC CAGTCATGGTATCACTGGCATGGACCTCTGTCCGGCAGAGGTGTGGACTGGAGACCAGGATTCATGCTGGTCTGG AACAATGACATTGCCAACTTAAGACACAAAGCAGATTTTCAGAAGTGTCTGGTCAAGATAACATGCTGGCCAA CCACAATTCCTAGAGTTAAGAGAACCTTAAAAGATTACCGCTCATGCTAAAAGTATGTAAAGATCCCATGTACAG TATGATAGTGTACTTTTTTTAAAGGACTGTCAATATACAAAACTTTAAAGATTAAAAACATTAAAAAATAAAAAAA

790/2825 **FIGURE 698**

 ${\tt MFRKGKKRHSSSSQSSEISTKSKSVDSSLGGLSRSSTVASLDTDSTKSSGQSNNNSDTCAEFRIKYVGAIEKLKLSEGKGLEGPLDLINYIDVAQQDGKLPFVPPEEEFIMGVSKYGIKVSTSDQYDVLHRHALYLIIRMVCYDDGLGAGKSLLALKTTDASNEEYSLWVYQCNSLEQAQAICKVLSTAFDSVLTSEKP}$

791/2825 **FIGURE 699A**

GGCACGGGGACATCAGGATATCCTGAGTGTGTCTGCAGATGGTGGCATCGTGATGGGCTATTCTAGTGGCGTCAC CAATGGGCTGAATGATGCCAGCGACTCCATCTACACGAAAGGCACCCCGGAGATTGCTTTCTGGGGAAGCAATGC TGGGGTGAAAACACACGGCTAGAAGCTCATTCTGAAATGGGGAGCACTGAAATTTTGGAAAAGGAGACCCCAGA AAATCTCAGTAATGGTACCAGCAGCAATGTGGAAGCAGCCAAAAGGTTGGCCAAACGCCTTTATCAGCTGGACAG ATTCAAAAGATCAGATGTTGCAAAACACCTTGGCAAGAACAACGAATTTAGCAAACTAGTTGCAGAAGAATATCT GAAGTTTTTTGATTTTACAGGAATGACGCTGGATCAGTCACTCAGGTATTTCTTTAAAGCATTCTCTTTGTGGG AGAAACTCAAGAACGAGAGAGTTTTAATACACTTCTCCAATAGATATTTTTATTGTAACCCAGATACCATTGC TTCACAAGATGGAGTCCATTGCCTTACCTGTGCAATAATGCTTCTTAATACCGATCTACATGGCCACGTGAATAT TGGAAAGAAGATGACCTGTCAGGAGTTCATTGCAAATCTGCAAGGGGTAAATGAGGGTGTTGATTTCTCCAAGGA GTCTCCCTCAGAAAGTACTGAGGAGAAAGCTAACGGAACACATCCAAAGACCATCAGTCGTATTGGAAGTACTAC TAACCCATTTTTGGACATTCCTCATGATCCAAATGCTGCTGTGTACAAAAGTGGATTCTTGGCTCGGAAAATTCA TGCAGATATGGATGGAAAGAAGACTCCAAGAGGAAAACGAGGATGGAAAACCTTTTATGCTGTACTGAAGGGAAC AGTTCTTTACTTGCAAAAGGATGAATACAAGCCAGAAAAGGCCTTGTCTGAAGAGAGGACTTGAAAAACGCTGTGAG TGTGCACCACGCATTGGCATCCAAGGCCACGGACTATGAGAAGAAACCAAACGTGTTTAAACTTAAAACTGCCGA CTGGAGGGTCTTGCTTTTTCAAACTCAGAGCCCAGAGGAAATGCAAGGGTGGATAAACAAAATCAATTGTGTGGC CACTACAACAAACTGTCTCAGGAGGAGCAACTGAAGTCACATGAAAGTAAGCTGAAGCAGATCACCACCGAGCT GGCCGAGCACCGCTCATATCCCCCCGACAAGAAGGTCAAAGCCAAGGACGTCGATGAGTACAAACTGAAAGACCA TAACGATGAAAGCGAGGCTGCAGGACTGAAGAAGTCGCACTCGAGTCCTTCGCTGAACCCGGATACTTCTCCAAT CACTGCCAAAGTCAAGCGTAACGTGTCAGAGGGAGGATCACCGACCTGAAACACCAAGCATTAAGCAAAAAGT TACT**TAG**AGTCCATCTGCGGCCAGGAAGTGCTGGTCATGGAGCAAAATAGGGTTTTTCAAGATCTTTCTGGTAAT CCGTGAATATATTTAAAAAAAAAAAAGTCTGTGACAAAACGGTGCATTAGTAATTTTTTCTATTGTATATTTTTG TTAGTTTCTGTACAGATTGTCTTTGCTCTTGATTTCTTTTGCTTTTGATGATTTTTTGCAACTTGATAGCTAATGCA CCTTTCTGTGAGGAGGGGGATCGTGATTTCAGAATGAATTATGTATCCCTTCTCTTTTGGTTTTCTCTTGTT ATTGTGAAACACTTAACTGGACAAACTGTAGTTTAGTAAATTCTAGCTGGAGTTAATATACGCCTTTATATGTG AAATCTTGCCCAGTCACAGAGGTAGAATTGAGCACTCACAGATGCTCCAGTAAGAATCACAGTGCTGGGAATCTA GTTGCTCCAATATGAGGCAGCTTCATGTGCAGCTTAGCACTTGTTGAGATCGGACCCTGCTGGAAGCAGGGA GCCAAGCAAGGGAAAGAGGAAGTGGAGTCATTTTGCCTTTGAAGGCTGAGGAAAGATTGATACCCAGTTAATTTT GTTTGCTAAAGGATGGGGGCAATAATCGGCCCTTGAGGAGCTGCAGCAGTAGGCATGTGCTCAGTCTGCAGGAAT GATATTGAGGTCTTCCTTACCAAATTAATACTAAAATGAAACAGCTTTTCTTGTGTCCTTAAGACAAAATAA GGAAGGAAAACGTAGCTGCAGTTGTCCACGATGGATATTGGTTCTTTAAAATATATCTGAAAGTAGTAGTCAGAA TGAATTATGGTTGGAAAACTGAGGAATCTTCTGGTTGCAGGTGCAAAGTGACTTTGTTTATTCTTGTCTCAGTCT CTGTCTACTCAAAATGGTTCTATTAACTTTGCAGTCATGAGCTTGTTCCAGTTACAGTCCCTTTGAAGTTCAGGG TGATAAACAGAATATTCTTCTGTAGAGGAAGAGAAAGGAGTGAAAGTTTAGCCCACTGAGACCTAGAGCTTTGTG ATTTCCTAACCTTGAAACTCTGTAATCCCTAAAGTTAAAATCTCCGCAAGTGGCACAACTTCAGAACTAATAGTA TCACTTTGATTTTTCTTTTTCCTCCCTTAGAAAGTTTCTCTAGTTCTATAGTTTATTTGTTGAAGGTACTATGAC CAAAGAATCAGCTGCTCTACAGGAATAGCATGGTTCCAGTGAATTAGAGAAAACCTGCTGTAAAGCCATGGTAGT TATTTTGCCACACCTGTAAAAAAAAAAAACCTCACTTTTAACTCTCTGCCTTGTTTGGGTAAAGGCAGTAACTAA

792/2825 **FIGURE 699B**

TCTCACTGAATCCAACATATCCACAAGCAAGTTATCTGTCTTTCTACCTGATAATCTAAATTATCAGGATATTTG TTTTCTGCCTAAATGTTTATACTAAGCCGAGGGGAGAGAGTACCTAGACCATGTCATCTACGAGCTTCAGTAAC TAAAGAAAAAGGAACTTCCCTGAGTGGCTTGAATGTGTTTTGCCCACAGTCTATATCTATGTATATAGAATGTCTG TATGTATTTACTTATTTAATATACATTGAATGGTACCTTGCTACAGTATTTCTGACATTTAGAGTAGTGTTGAA ATACTCGGCTAGCATCAGCACCACTATAGCACTGTCCGTGTCATATGAGTCACTAATATTAACTCCAGGGACTTC TGGATAGGCTAATAGATCATTGGATACGAAGGGCTCTTTTGAAGCTTCAGTATACCATGTTTGCATAGTTTATCT TTAAAAACAACTTTAAAGGTTCTTTTGTGAGCCAGGATCTCAGACTGCCGTAGCATGATGCTGTCCATCTTTAGC AGTTTATGCTATGGGAGGAACCAGTCACTGATTTGCCTAGATTCTGAGAGTCTGGCCCATAGCCAACCACATTTT CCTTTGGGATAATTTATTTCCTGTGGCATCTAGCCAGAAGAAATTGAGGATGTTTCCTTTCACAGCTGCTCCAAG CACCTCAGCGCCCAGGAGCCTTGGGACTTCCTTCCATATGATAAATCATTCTTCTTCACGTCAATACACTTCATA TTAATTTCTAGTACAGAAAATCTTGACAGCTATCAGAATGCCTTGGTCATAGTGTTGTTGCAAAATTGACCATAC AGGTGGCCCATGTATAAAATCTGAATTTTAGGGGTTTGTCCCCACCTCGCATGCTGGCTTTTACAGGGAGGTGTC TGGGATTCCTCATTAGCAATCAAAACTTAATTACTGGGATGCAGAGTCCTTACTTTATCGCCAGCCCGTAGGCAT TTCTGAAGTGCACTTTTTTGAAACATCATTTTGCTAACTCTCAGCAGTGTCTAATTAAACTGAGCAATACTTTTG TGAATTTTAATTTAATCTCAGCAAAACCATGATGGGAGAGAGTCCTCTGATGGAAATGTAGTCCCTGGATTATGTG TAACCTTTTTATTGCTCTTAGATGCAGAGGATAGAAAGCATTTTTTGGTGCAGTGGTCTTGTGGCAAACACAAGA CCCTCTATGCGTCTCCAACTGTTATCCTAATCTAGAAAATGAGGACTGGCCCCTGGGCAAAAGTGACATGAGGAA TTTACTCTGGAAGAGGAAAATCTGGGTGGCTTTCCAAGGCTAAGATAGGTTTGTATTTCACCCTGTGGCCAAGCT ACAGAACTTCTGAGATTGTGGAAGAATTTTTGCAACCAGCAGGGAAAGAGGCCTCTTACTGCCTAAACACAAAGT TACACTGAGCTTTTCTACTGTCCTTTGCCTATTGCTCCTCTATCATGTAAAGATCTGGGAAGGATGAGAGGCAG GGCCTGCTTGTCATGAGCTGCACTCTTTTCTTTTTAACTAATCATTGACAATTGGAAGAAAATTGACGTTAAAGA AGTTTCTCCATTGTCTTACTAACAAAACCTTTTGGGTTTCATTAATTGTCCTTGAAATTGAGTTCCTTTGGCATT TTTCCTTGCAGTCATCAGTTAAGCATGTTGCATCCTGAATTCACAGAAGTTTAGCTTTGCAGGTTTGAATCTCTG TCCCTTGACTTTTCAAATGACAGAATTTTTTCCAATTGTAAAATTAGCACTGTAAAACAAAGAACCAAAGTGGCA TCCTAAGAGTTGTTAAACCTGAAGTCTAGTTTATGAGGAATTGTCCAAGTTGGAGTTTAAATAGTATCTGCTTTT ACCTTGCTCCACAGCTTTCTGGCCATCTTGTCTCCCAGGCCATGCCACTGCTCTGCCACATGTCAGCAAATTTCT TTCCACCAGTCTTATAGCATCTTACATGATCAAATCATCACAGAATAACCCCGTGATAGATTATTGATAGCAATA TCCAAAGGCATTCTCCTTTTGTACCTACAGTATCCAGAACCCACGTGGGCAGCCTTCTGCTTATGACAATAATTG GCCCATTGCATGCAGAGAATGTCTTCATAGAGAGAATGTCATTAAATACTTGAATCTGCATGACAGTTTGACT TGAATGCAACAGCAGGAAAATTTTGCAAGTTACATAATTGTATATACAGTAGGTTTTCTTAAGTCTCTTCGGTTC ATCCTTTGTAATTTGTGTGTGTATCTGTAGTATTGCAGGCTTTTTGGAGACTATTCTTACAGGCAGTATGTCAGTC GTGTAGATTGCATATCAGTGTATGGTACATGTACATCAAAATTATTTTTGTCCTTAATCAGTGTGATATGAAAAAG TAAACTCAAATAATATTTTGATTAAAAATTTTTAATAAGACTTTATGCTAGAAAATTCTTTGAGCTTTGAATCACC AGGGCAAAAATGACTTTCAACTAACCTTGTGAATCTTTTGCAGTGTACTGTGTGCAATACCAAGGGCATAGCTCC

793/2825 FIGURE 700

MGYSSGVTNGLNDASDSIYTKGTPEIAFWGSNAGVKTTRLEAHSEMGSTEILEKETPENLSNGTSSNVEAAKRLA KRLYQLDRFKRSDVAKHLGKNNEFSKLVAEEYLKFFDFTGMTLDQSLRYFFKAFSLVGETQERERVLIHFSNRYF YCNPDTIASQDGVHCLTCAIMLLNTDLHGHVNIGKKMTCQEFIANLQGVNEGVDFSKDLLKALYNSIKNEKLEWA VDDEEKKKSPSESTEEKANGTHPKTISRIGSTTNPFLDIPHDPNAAVYKSGFLARKIHADMDGKKTPRGKRGWKT FYAVLKGTVLYLQKDEYKPEKALSEEDLKNAVSVHHALASKATDYEKKPNVFKLKTADWRVLLFQTQSPEEMQGW INKINCVAAVFSAPPFPAAIGSQKKFSRPLLPATTTKLSQEEQLKSHESKLKQITTELAEHRSYPPDKKVKAKDV DEYKLKDHYLEFEKTRYEMYVSILKEGGKELLSNDESEAAGLKKSHSSPSLNPDTSPITAKVKRNVSERKDHRPE TPSIKQKVT

794/2825 FIGURE **701**

GTGGCCGCGCAGGAGGACGGAGCCCTAACCGCAACCCGCGCCGCGCCGCCGCGCCGATTTGATTTGTATCCACTGTCA CCAGCACTGCTCACTTAGGACTTTCTGGATCCAGACCCAGGCAGCGCACACTGGACTCTTGAGGAAGAAGGAGAC TCTAATTTTGGATTCCTTGGTGGAGGAAAATAAAACACTCTGGTCTTGCCGCCAACGATGCAAGTGTGACTGCTG GCGTCTTCATGAGCTCCAGAGGTCACAGCACGCTACCAAGGACTCTCATGGCCCCTCGGATGATTTCCGAGGGAG ACATAGGAGGCATTGCTCAAATCACCTCCTCTATTCCTGGGCAGAGGCAGTGTGGCCTCCAATCGGCACCTCC TCCAGGCTCGTGGCATCACCTGCATTGTTAATGCTACCATTGAGATCCCTAATTTCAACTGGCCCCAATTTGAGT ATGTTAAAGTGCCTCTGGCTGACATGCCGCATGCCCCATTGGACTGTACTTTGACACCGTGGCTGACAAGATCC ACAGTGTGAGCAGGAAGCACGGGGCCACCTTGGTGCACTGTGCTGCAGGGGTGAGCCGCTCAGCCACGCTGTGTA TCGCGTACCTGATGAAATTCCACAACGTGTGCCTGCTGGAGGCATACAACTGGGTGAAAGCCCGGCGACCTGTCA TCAGGCCCAACGTAGGCTTCTGGAGGCAACTGATAGACTACGAGCGCCAGCTCTTTGGGAAGTCGACAGTTAAAA TGGTACAGACACCTTATGGCATAGTTCCCGACGTCTATGAGAAGGAGTCCCGACACCTGATGCCTTACTGGGGGA GATAGGGAGGGAGGGACATAAAGGGAATGCATACATTGCTAGTCACATTTTTAAAATTAACATTTTGGAATAGT GTTTATGGAAATCTTTAGCTTTTAATCATTTTTACCAATTTGAACAGTTTAATAAACTGGTTCTGCTCTTCTG AATCTCATGCCTTTGGCACCTTGGTAGGTGCAGGAGGAGCTCAGTGCAAAAATCACTTTGGGGCCTCATTAACCC TTTAGCTGTTAAGTAACTATAATGAAATCTGCTGCAAAATCTCTCTTGGAATCCATGTGCCCAGGATTATATTAG

795/2825 FIGURE **702**

 ${\tt MSSRGHSTLPRTLMAPRMISEGDIGGIAQITSSLFLGRGSVASNRHLLQARGITCIVNATIEIPNFNWPQFEYVK} $$ VPLADMPHAPIGLYFDTVADKIHSVSRKHGATLVHCAAGVSRSATLCIAYLMKFHNVCLLEAYNWVKARRPVIRP NVGFWRQLIDYERQLFGKSTVKMVQTPYGIVPDVYEKESRHLMPYWGI$

796/2825 FIGURE **703**

CTGGTGACTCGCGGCGGCGGCGGACGGCCCAGCCGGAGCGCGCTCGGGGGGGCGCGGCGGTTCGGGT GGCGAGATGCCGCTCGCCCAGCTCAAGGAGCCCTGGCCGCTCATGGAGCTAGTGCCGCTGGACCCGGAGAATGGA CAGACCTCAGGGGAAGAAGCTGGACTTCAGCCGTCCAAGGATGAGGGCGTCCTCAAGGAGATCTCCATCACGCAC CACGTCAAGGCTGGCTCTGAGAAGGCTGATCCATCCCATTTCGAGCTCCTCAAGGTTCTGGGCCAGGGATCCTTTGGCAAAGTCTTCCTGGTGCGGAAAGTCACCCGGCCTGACAGTGGGCACCTGTATGCTATGAAGGTGCTGAAGAAG GCAACGCTGAAAGTACGTGACCGCGTCCGGACCAAGATGGAGAGACATCCTGGCTGATGTAAATCACCCATTC GTGGTGAAGCTGCACTATGCCTTCCAGACCGAGGGCAAGCTCTATCTCATTCTGGACTTCCTGCGTGGTGGGGGAC CTCTTCACCCGGCTCTCAAAAGAGGTGATGTTCACGGAGGAGGATGTGAAGTTTTACCTGGCCGAGCTGGCTCTG GGCCTGGATCACCTGCACAGCCTGGGTATCATTTACAGAGACCTCAAGCCTGAGAACATCCTTCTGGATGAGGAG GGCCACATCAAACTCACTGACTTTGGCCTGAGCAAAGAGGCCCATTGACCACGAGAAGAAGGCCTATTCTTCTGC GGGACAGTGGAGTACATGGCCCCTGAGGTCGTCAACCGCCAGGGCCACTCCCATAGTGCGGACTGGTGGTCCTAT GGGGTGTTGATGTTTGAGATGCTGACGGGCTCCCTGCCCTTCCAGGGGAAGGACCGGAAGGACCATGACACTG ATTCTGAAGGCGAAGCTAGGCATGCCCCAGTTTCTGAGCACTGAAGCCCAGAGCCTCTTGCGGGCCCTGTTCAAG CGGAATCCTGCCAACCGGCTCGGCTCCGGCCCTGATGGGGCAGAGGAAATCAAGCGGCATGTCTTCTACTCCACC ATTGACTGGAATAAGCTATACCGTCGTGAGATCAAGCCACCCTTCAAGCCAGCAGTGGCTCAGCCTGATGACACC TTCTACTTTGACACCGAGTTCACGTCCCGCACACCCAAGGATTCCCCAGGCATCCCCCCAGCGCTGGGGCCCAT CAGCTGTTCCGGGGCTTCAGCTTCGTGGCCACCGGCCTGATGGAAGACGACGGCAAGCCTCGTGCCCCGCAGGCA CCCCTGCACTCGGTGGTACAGCAACTCCATGGGAAGAACCTGGTTTTTAGTGACGGCTACGTGGTAAAGGAGACA ATTGGTGTGGGCTCCTACTCTGAGTGCAAGCGCTGTGTCCACAAGGCCACCAACATGGAGTATGCTGTCAAGGTC ATTGATAAGAGCAAGCGGGATCCTTCAGAAGAGATTGAGATTCTTCTGCGGTATGGCCAGCACCCCAACATCATC ACTCTGAAAGATGTGTATGATGATGGCAAACACGTGTACCTGGTGACAGAGCTGATGCGGGGTGGGGAGCTGCTG GACAAGATCCTGCGGCAGAAGTTCTTCTCAGAGCGGGAGGCCAGCTTTGTCCTGCACACCATTGGCAAAACTGTG GAGTATCTGCACTCACAGGGGGTTGTGCACAGGGACCTGAAGCCCAGCAACATCCTGTATGTGGACGAGTCCGGG AATCCCGAGTGCCTGCGCATCTGTGACTTTGGTTTTGCCAAACAGCTGCGGGCTGAGAATGGGCTCCTCATGACA CCTTGCTACACAGCCAACTTTGTGGCGCCTGAGGTGCTGAAGCGCCAGGGCTACGATGAAGGCTGCGACATCTGG AGCCTGGGCATTCTGCTGTACACCATGCTGGCAGGATATACTCCATTTGCCAACGGTCCCAGTGACACACCAGAG GAAATCCTAACCCGGATCGGCAGTGGGAAGTTTACCCTCAGTGGGGGAAATTGGAACACAGTTTCAGAGACAGCC AAGGACCTGGTGTCCAAGATGCTACACGTGGATCCCCACCAGCGCCTCACAGCTAAGCAGGTTCTGCAGCATCCA TGGGTCACCCAGAAAGACAAGCTTCCCCAAAGCCAGCTGTCCCACCAGGACCTACAGCTTGTGAAGGGAGCCATG ${\tt GCTGCCACGTACTCCGCACTCCAACAGCTCCAAGCCCACCCCCAGCTGAAGCCCATCGAGTCATCCTGGCC}$ CAGCGGCGAGTGAGGAAGTTGCCATCCACCACCCTG**TGA**GGCACCAGGGCATTCGGGCCACAGGGCGGTGCTAGC TTGACAGAGTCAGCATGCTTCCCAGAGGGAGCAGGCCGGAACCACAGGGCCAGAGGGAGCTGGAACCCGAGGGGC $\tt CGGGGAAGCTGCCAGCACAGAACACCCCTAATGAGGGTGTGAGAAGTGCCTTCTCCTTCCCCAGGATGGACTCTT$ CATGGATTTTTACAAGATCCATTTGCCTTTCTGGGAGCAGAAACAGCCATTGCGGCCCCAGGAGGGGAACTGAGT CACGCTGGGGCTCTCTGAGACTCTTTAGAGCAGCTTTGGGGATCCCACCTGGGGACCCCCATGATTGGCCACCTG TAGCCATCTGCACACCTCCGAGACAGTCCAGTGTCACCTCTCTCAGAGCATCTGGCTGTTTAGCAGAACTCAT TCTATCCCCAATCAGCTCCTTTTCCGTTCTGTTCTGCTGGGAGTTCTAGAACCACTTCCTGCTACAGGAGGGGTC TCATGTCCTGCTGGCTTCCAGCTTCAGGCACCAGCATCCACCTTGGCTCTGCCAGTGGATCCCCTGCGGTCAGGC TGGGCAGCCCCAGAGAGAGGATGTGGAAAGCACTTTTTGGCTGACTTCATCTGGGGTTGGCAACAGGACAGAGTT CACAGGAGGCCAGTGGGCCGGCCATGAGGGACAGGGTCTTTTTTCATTTCTTCCTCAGCTGGTTACTCAGGGTTC

797/2825 **FIGURE 704**

MPLAQLKEPWPLMELVPLDPENGQTSGEEAGLQPSKDEGVLKEISITHHVKAGSEKADPSHFELLKVLGQGSFGK VFLVRKVTRPDSGHLYAMKVLKKATLKVRDRVRTKMERDILADVNHPFVVKLHYAFQTEGKLYLILDFLRGGDLF TRLSKEVMFTEEDVKFYLAELALGLDHLHSLGIIYRDLKPENILLDEEGHIKLTDFGLSKEAIDHEKKAYSFCGT VEYMAPEVVNRQGHSHSADWWSYGVLMFEMLTGSLPFQGKDRKETMTLILKAKLGMPQFLSTEAQSLLRALFKRN PANRLGSGPDGAEEIKRHVFYSTIDWNKLYRREIKPPFKPAVAQPDDTFYFDTEFTSRTPKDSPGIPPSAGAHQL FRGFSFVATGLMEDDGKPRAPQAPLHSVVQQLHGKNLVFSDGYVVKETIGVGSYSECKRCVHKATNMEYAVKVID KSKRDPSEEIEILLRYGQHPNIITLKDVYDDGKHVYLVTELMRGGELLDKILRQKFFSEREASFVLHTIGKTVEY LHSQGVVHRDLKPSNILYVDESGNPECLRICDFGFAKQLRAENGLLMTPCYTANFVAPEVLKRQGYDEGCDIWSL GILLYTMLAGYTPFANGPSDTPEEILTRIGSGKFTLSGGNWNTVSETAKDLVSKMLHVDPHQRLTAKQVLQHPWV TOKDKLPQSQLSHQDLQLVKGAMAATYSALNSSKPTPQLKPIESSILAQRRVRKLPSTTL

798/2825 **FIGURE 705**

GCGTGGAGGTCGACGACTCCGTCGCAGACTACGGACCTGTCTGGGTCTCAGCCGCCAAAGACCCCGTCCGGTAGG TGAGTGGCTCACTTTGAGGGCAAGCCTTCTCGGATCGAGGCTTCTTCATGGCCGCTCAGATCGTGAGCGGCCGGG GCTGCTCTCTTTGCGGAGGATGGCGTCTAATGAGCGCAGTTGATTCGAGGAAGTACTAGCCGGACATC**ATG**AGTG GCTGTCGGGTATTCATCGGGAGACTAAATCCAGCGGCCAGGGAGAAGGACGTGGAAAGATTCTTCAAGGGATATG GACGGATAAGAGATATTGATCTGAAAAGAGGCTTTGGTTTTGTGGAATTTGAGGATCCAAGGGATGCAGATGATG CTGTGTATGAGCTTGATGGAAAAGAACTCTGTAGTGAAAGGGTTACTATTGAACATGCTAGGGCTCGGTCACGAG GTGGAAGAGGTAGAGGACGATACTCTGACCGTTTTAGTAGTCGCAGACCTCGAAATGATAGACGGTATGTGAAGG $\tt GTGGATGGCTGCAT \underline{\textbf{TGA}} A CAATTATTGTAGGGGTAGCATTTAAGATTCAGGAGTCATTAGCAGTGATGATTTTGG$ GACCTGCCGTATAATCTGTTCTTCTATTCCCACGTTAGCCAATTGTTCTTGATGAATCTATATGAGTCATAGAAC ACAAATCTATTGACGGAAGTCATTAGAATGGCTTGTGATATCTGATGGCTTGAACTTGCCCACAGTTGAACACAA GTGCTGTCATTGCATTTCTTCCATTGTGAATACGAATTTTCTTCCTCAGAAATGCTCCACCTGTAAGAACAGAAA ATCGTCTTATAGTTGAGAATTTATCCTCAAGAGTCAGCTGGCAGGATCTCAAAGATTTCATGAGACAAGCTGGGG AAGTAACGTTTGCGGATGCACCCGACCTAAATTAAATGAAGGGGTGGTTGAGTTTGCCTCTTATGGTGACTTAA ACAGGTCAAGAAGCAGGTCTCGATCCCGGACCAGAAGTTCCTCTAGGTCTCGTAGCCGATCCCGTTCCCGTAGTC GCAAATCTTACAGCCGGTCAAGAAGCAGGAGCAGGAGCCGGAGCCAGGCCGGTTCTGTTAGTAGGTCTC CCGTGCCTGAGAAGAGCCAGAAACGTGGTTCTTCAAGTAGATCTAAGTCTCCAGCATCTGTGGATCGCCAGAGGT $\verb|CCCGGTCCCGATCAAGGTCCAGATCAGTTGACAGTGGCAATTAAACTGTAAATAACTTGCCCTGGGGGCCTTTTT| \\$ TTTTAAAAAACAAAAACCACAAAAATTCCCAAACCATACTTGCTAAAAATTCTGGTAAGTATGTGCTTTTCTGTG GGGGTGGGATTTGGAAGGGGGGTTGGGTTGGGCTGGATATCTTTGTAGATGTGGACCACCAAGGGGTTGTTGAAA ACTAATTGTATTAAATGTCTTTTGATAAGCCTTCTGCTCACATTTTTTGTGAATGTCTGAAGTATATAGTTTGTGT ${\tt AGAGCTCTAAATTTGCTTGTACATAAAGGCTTAATTTGTTTTCCTTGTTAGGGTCAAGGGTGTCCTCCACTCTTT}$ AACAGCTGCTGGACAGACACATTAGAGCAGCTGTTTGTTATTGATAAAAATATTATAAAACTA

799/2825 FIGURE **706**

 ${\tt MSGCRVFIGRLNPAAREKDVERFFKGYGRIRDIDLKRGFGFVEFEDPRDADDAVYELDGKELCSERVTIEHARARSRGGRGRGRYSDRFSSRRPRNDRRYVKGGWLH}$

800/2825 FIGURE 707

GCTGCGTTGCTGGTCACATTCCTGGCAGGATGCCAGGCCAAGGTGGAGCAAGCGGTGGAGACAGAGCCGGAGCCC GAGCTGCGCCAGCAGACCGAGTGGCAGAGCGGCCAGCGCTGGGAACTGGCACTGGGTCGCTTTTGGGATTACCTG CGCTGGGTGCAGACACTGTCTGAGCAGGTGCAGGAGGAGCTGCTCAGCTCCCAGGTCACCCAGGAACTGAGGGCG CTGATGGACGAGACCATGAAGGAGTTGAAGGCCTACAAATCGGAACTGGAGGAACAACTGACCCCGGTGGCGGAG GAGACGCGGGCACGGCTGTCCAAGGAGCTGCAGGCGGCGCAGGCCCGGCTGGGCGCGGACATGGAGGACGTGTGC GGCCGCCTGGTGCAGTACCGCGGCGAGGTGCAGGCCATGCTCGGCCAGAGCACCGAGGAGCTGCGGGTGCGCCTC GCCTCCCACCTGCGCAAGCTGCGTAAGCGGCTCCTCCGCGATGCCGATGACCTGCAGAAGCGCCTGGCAGTGTAC CAGGCCGGGGCCCGAGGGCGCCGAGCGCCTCAGCGCCATCCGCGAGCGCCTGGGGCCCCTGGTGGAACAG CGGCTGCGCGCGCGGATGGAGGAGGTGGCCAGCCGGACCGCCTGGACGAGGTGAAGGAGCAGGTGGCG GAGGTGCGCGCCAAGCTGGAGGAGCAGGCCCAGCAGATACGCCTGCAGGCCGAGGCCTTCCAGGCCCGCCTCAAG AGCTGGTTCGAGCCCCTGGTGGAAGACATGCAGCGCCAGTGGGCCGGCTGGTGGAGAAGGTGCAGGCTGCCGTG GGCACCAGCGCCCCTGTGCCCAGCGACAATCACTGAACGCCGAAGCCTGCAGCCATGCGACCCCACGCCACC TAGTTTAATAAAGATTCACCAAGTTTCACGC

801/2825 FIGURE 708

MKVLWAALLVTFLAGCQAKVEQAVETEPEPELRQQTEWQSGQRWELALGRFWDYLRWVQTLSEQVQEELLSSQVT QELRALMDETMKELKAYKSELEEQLTPVAEETRARLSKELQAAQARLGADMEDVCGRLVQYRGEVQAMLGQSTEE LRVRLASHLRKLRKRLLRDADDLQKRLAVYQAGAREGAERGLSAIRERLGPLVEQGRVRAATVGSLAGQPLQERA QAWGERLRARMEEMGSRTRDRLDEVKEQVAEVRAKLEEQAQQIRLQAEAFQARLKSWFEPLVEDMQRQWAGLVEK VQAAVGTSAAPVPSDNH

802/2825 FIGURE 709A

ATGCCTCACCTAAAGCGACTAGTAAAATTACACATTAAAAGACATTACCATAAAAAGTTCTGGAAGCTTGGTGCA AGGATGGAAAGGAACATGAAAAACAAAAACAAGATGTTGGATTTAATGCTAGAAGCTGTAAACAATATTAAGGAT GCCATGCCAAAAATGCAAATAGGAGCACCTGTCAGGCAAAACATTGATGCTGGTGAGAGACCTTGTTTGCAAGGA TATTATACAGCAGCAGAATTGAAGCCTGTCCTTGACCGTCCACCTCAGGATTCAAATGCACCTGGTGCTTCTGGT AAAGCATTCAAGACAACCAATTTAAGTGTTGAAGAGCAAAAGGAAAAGGAACGTGGGGAAGCTAAACACTGCTTT AATGCTTTCGCAAGTGACAGGATTTCTTTGCACCGAGATCTTGGACCAGACACTCGACCTCCTGAATGTATTGAA CAAAAATTTAAGCGCTGCCCTCCCCTGCCCACCACCAGTGTCATAATAGTTTTTCATAATGAAGCGTGGTCCACG TTGCTTAGAACTGTCCACAGTGTGCTCTATTCTTCACCTGCAATACTGCTGAAGGAAATCATTTTGGTGGATGAT GCTAGTGTAGATGAGTACTTACATGATAAACTAGATGAATATGTAAAACAATTTTCTATAGTAAAAAATAGTCAGA CAAAGAGAAAGAAAAGGTCTGATCACTGCTCGGTTGCTAGGAGCAACAGTCGCAACAGCTGAAACGCTCACATTT TTAGATGCTCACTGTGAGTGTTTCTATGGTTGGCTAGAACCTCTGTTGGCCAGAATAGCTGAGAACTACACGGCT GTCGTAAGTCCAGATATTGCATCCATAGATCTGAACACGTTTGAATTCAACAAACCTTCTCCTTATGGAAGTAAC CATAACCGTGGAAATTTTGACTGGAGTCTTTCATTTGGCTGGGAGTCGCTTCCTGATCATGAGAAGCAAAGAAGG AAAGATGAAACCTACCCAATTAAAACACCCACTTTTGCAGGAGGACTTTTTTCCATATCAAAAGAATATTTTGAG TATATTGGAAGCTATGATGAAGAAATGGAAATCTGGGGAGGTGAAAATATAGAAATGTCTTTCAGAGTATGGCAA TGTGGTGGCCAGTTGGAGATTATGCCTTGCTCTGTTGTTGGACATGTTTTTCGCAGCAAAAGCCCTCATAGCTTT TTTTATAGGAGAAATACAGATGCAGCAAAAATTGTTAAACAAAAAGCATTTGGTGATCTTTCAAAAAAGATTTGAA ATAAAACACCGTCTTCGGTGTAAAAATTTTACATGGTATCTGAACAACATTTATCCAGAGGTGTATGTGCCAGAC CTTAATCCTGTTATATCTGGATACATTAAAAGCGTTGGTCAGCCTCTATGTCTGGATGTTGGAGAAAACAATCAA GGAGGCAAACCATTAATTATGTATACATGTCATGGACTTGGGGGAAACCAGTACTTTGAATACTCTGCTCAACAT GAAATTCGGCACAACATCCAGAAGGAATTATGTCTTCATGCTGCTCAAGGTCTCGTTCAGCTGAAGGCATGTACC TACAAAGGTCACAAGACAGTTGTCACTGGAGAGCAGATATGGGAGATCCAGAAGGATCAACTTCTATACAATCCA TTCTTAAAAATGTGCCTTTCAGCAAATGGAGAGCATCCAAGTTTAGTGTCATGCAACCCATCAGATCCACTCCAA AAATGGATACTTAGCCAAAATGAT**TAA**GTGTTCCTTAAAATTAAGTTGAAAAAGGAAATATTCTTCTCATAAAA CTGTGACTAGGCATACACTGTAGTTTTTGAAAATTATGCAAAAGCAGCTAAATGTAACTTATTCCAAGTGCATTT TTCTTATTTATATCTTTATGTAGCACTACTACAGAAATTCTGCAAGTTTCTGTTTCAAAGCACAATAACTAGTAA TACCAAAGACTATTTCAAAATGTCCAGATGTAGGGGAAGAGATGTTTACAGTATGATGAAAATAATTTTCCAAGT ATTTCCCCTAGTTTTTTGGGGGGGATAGGAAGAAGATTTGTTACTGTATTTTTTAACTACATAAAAATAGATCA ATAAATGTCAGCATTGGCCTCTGTGTACAAACCAAGAGCTTTTACAGATCCAGAATTTATTAGTTTAAAATGCAG GTGAACTTTTTTTTGCGTTTGGTTTACTTGTCTGTCAAATGTTTCCTTAAACATGAAACTGAATAAGGAGAAGAG TATTTTTAACACTTAAATTTCTTGGCAAATTTTAAAACATTTTTTAGTCTGTAATACACTCCACTTGAAGCACTT AAGTCTTCCTTAAATGACTTTTCTTAAGTAATGATACTGTGTGTTTTTCCCAAAGCACTTTTAAAAAAATTTTTAT GAATGTTTGTGATATTAAATTTCAAATGCAGAATACTTGACTCATTTAAAGCTAAATTTTGTTACTGATTCAATT ATAATTGTAATGGATTTTTGACTTTGTAATGGATTCTTTTCATCAAAAAGCCTTATTATTTTTTATCTATGTGGA AAACACAATAAAAAATCCTCAACACTATTGTAATCATTTGGTTAAGTGCTTATTCCTCTTTTGGGTAAAATCTGT TATTTCTTATGGCACAAAAATGAGGAATAGCAAAATTCCTGTGTTCAATATTTAGAAAATTTTGTATTAATTTC ATATTTTAAATCTGGCAGAGCCTCAGCTGTACGAAAAAGAGCATATACTGGTTATTGACCCTATCTTCTCATTGT TTGTTTGTAAGTTTGAATTTGTATTAAAAAGCCTGCATTCTGAGCTGGACATGGTGGCTCAGCTTCTAATCCCAG CACTTTGGTAGGCAAAGGTGGGAGGATCATTTGAGCTCAGGAGTTCCAGACCAGCCTGGGCAACATAGCAAAATC TCATCTCTACAAAAAGTAAAAATTAAAAAATGAAATTAAAAATAAAATTACCTAGGTGTGGTGGCACGCATCTGT AGTTCCAGCTATACAGGAAGGTGAGGCAGAAGCATTGCTTGAGCTTGGGAGATCGAGGCTACAGTGAGCTATGAT

803/2825 FIGURE 709B

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804/2825 FIGURE 710

MAHLKRLVKLHIKRHYHKKFWKLGAVIFFFIIVLVLMQREVSVQYSKEESRMERNMKNKNKMLDLMLEAVNNIKD AMPKMQIGAPVRQNIDAGERPCLQGYYTAAELKPVLDRPPQDSNAPGASGKAFKTTNLSVEEQKEKERGEAKHCF NAFASDRISLHRDLGPDTRPPECIEQKFKRCPPLPTTSVIIVFHNEAWSTLLRTVHSVLYSSPAILLKEIILVDD ASVDEYLHDKLDEYVKQFSIVKIVRQRERKGLITARLLGATVATAETLTFLDAHCECFYGWLEPLLARIAENYTA VVSPDIASIDLNTFEFNKPSPYGSNHNRGNFDWSLSFGWESLPDHEKQRRKDETYPIKTPTFAGGLFSISKEYFE YIGSYDEEMEIWGGENIEMSFRVWQCGGQLEIMPCSVVGHVFRSKSPHSFPKGTQVIARNQVRLAEVWMDEYKEI FYRRNTDAAKIVKQKAFGDLSKRFEIKHRLRCKNFTWYLNNIYPEVYVPDLNPVISGYIKSVGQPLCLDVGENNQ GGKPLIMYTCHGLGGNQYFEYSAQHEIRHNIQKELCLHAAQGLVQLKACTYKGHKTVVTGEQIWEIQKDQLLYNP FLKMCLSANGEHPSLVSCNPSDPLQKWILSQND